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**GEOLOGICAL SURVEY OF CANADA  
OPEN FILE 7837**

**Space Weather Bulletin - 2014**

**R.A.D. Fiori, L. Nikolic, H.-L. Lam, L. Trichtchenko, D. Danskin,  
L. McKee, D.H. Boteler, C. Blais**

**2015**

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## 1. Introduction

Space weather refers to changes in the space environment resulting from solar phenomena like coronal mass ejections (CMEs), coronal holes, solar flares and energetic particles that can adversely affect human activities and technologies on Earth and in space. The sun emits energy, as flares of electromagnetic radiation (radio waves, infra-red, light, ultraviolet, X-rays), and as energetic electrically charged particles through coronal mass ejections (CME) and plasma streams (i.e., coronal holes). The particles travel outwards as the solar wind, carrying parts of the Sun's magnetic field with them. The radiation and particles interact with the Earth's geomagnetic field and outer atmosphere in complex ways, causing concentrations of energetic particles to collect and electric currents to flow in the magnetosphere and ionosphere.

Whenever severe solar phenomena occur they have the potential to impact the geomagnetic field triggering geomagnetic storms. Geomagnetic storms are variations in the Earth's magnetic field that can last hours or days, and can directly affect operations that rely on the Earth's magnetic field. The geomagnetic field variations can also cause unexpected electric currents to flow in long conductors such as power systems and pipelines, potentially damaging those systems. In the northern hemisphere, geomagnetic activity is strongest in a band called the auroral oval which surrounds the north magnetic pole (located in the Arctic Ocean near the Canadian Arctic Archipelago) and extends across Canada. Due to its location with respect to the north magnetic pole, Canada is the country most affected by space weather and geomagnetic storms.

The effects of space weather include (but are not limited to) geomagnetically induced currents in power systems and pipelines, azimuthal errors in directional drilling, disruptions to high frequency radio communication and GPS navigation, and failure or misoperation of satellites.

Government of Canada work on space weather and geomagnetic activity is undertaken by Natural Resources Canada scientists in the Canadian Space Weather Forecast Centre<sup>1</sup> (CSWFC). The CSWFC is responsible for researching, monitoring, forecasting, and reporting on space weather and its impacts in an effort to reduce the vulnerability of Canadian infrastructure to space weather.

The Space Weather Bulletin is generated by the Canadian Space Weather Forecast Centre and provides recipients with a daily description of the current conditions, 24-hour prediction and 24-hour review of solar, interplanetary, and geomagnetic conditions and observed events. The bulletin also lists possible impacts to technology. The main users of the bulletin are Government of Canada Departments and Emergency Measures Organizations. 2014 represents year four of the bulletin dissemination to these communities<sup>234</sup>. A Guide to the Space Weather Bulletin<sup>5</sup> was published in order to provide a basic

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<sup>1</sup> <http://www.spaceweather.gc.ca>

<sup>2</sup> Fiori, R.A.D., Lam, H.-L., Trichtchenko, L., McKee, L., Danskin, D., Nikolic, L., 2012. Space Weather Bulletin - 2011, Geological Survey of Canada, Open File 7197. doi:10.4095/291896

<sup>3</sup> Fiori, R.A.D., Lam, H.-L., Trichtchenko, L., McKee, L., Danskin, D., Nikolic, L., 2013. Space Weather Bulletin – 2012, Geological Survey of Canada, Open File 7391. doi:10.4095/292881

<sup>4</sup> Nikolic, L., Fiori, R.A.D., Danskin, D., Trichtchenko, L., McKee, L., Lam, H.-L., 2014. Space Weather Bulletin – 2013; Geological Survey of Canada, Open File 7656, 417 p. doi:10.4095/295178

<sup>5</sup> Fiori, R.A.D., 2014. Guide to the Space Weather Bulletin, Geological Survey of Canada, Open File 7422. doi:10.4095/293873

understanding of the daily Space Weather Bulletin including general information about space weather to the users.

This report provides a description of the Space Weather Bulletin and documents the bulletins issued in 2014. A listing of typical bulletin statements is provided in Section 2 and possible impacts associated with varying levels of space weather activity are given in Section 3. Tables of values used to select descriptive statements used in the bulletin are given in Section 4. Section 5 describes statements issued in a related Twitter feed, and Section 6 summarizes geomagnetic activity in 2014. The collection of the daily bulletins is presented in Section 7.

## 2. Statements used in the 2014 daily space weather bulletin

This section provides a summary of the most recent (as of December 31, 2014) version of the *Space Weather Bulletin* in tabular format in both English and French. Tables are used to separate statements into common groupings. The descriptions below represent a fill-in-the-blank style template completed by the duty forecaster (DF).

Symbolic text, highlighted in red, represents dates and times. For example:

DD MMM YYYY	day month year	26 JUN 2012
HH:MM	hour:minute	08:19
xx	any number	5

In some instances the duty forecaster completing the form has a selection of terms. The words to be selected from are encased in brackets and highlighted in blue. Each possible term is separated by the '/' symbol. For example:

(Stormy / Major storm) conditions are possible within the next 24 hours.

Creates two possible sentences:

Stormy conditions are possible within the next 24 hours.

Major storm conditions are possible within the next 24 hours.

In some instances the duty forecaster completing the form may pick any number of entries highlighted in blue. In these cases, the last entry in the list is preceded by 'and' and the user is expected to place 'and' wherever it is required in the list. For example:

Stormy conditions are possible in the (polar cap / auroral / and sub-auroral) (zone / zones).

Creates several possibilities, such as

Stormy conditions are possible in the auroral zone.

Stormy conditions are possible in the polar cap and auroral zones.

Stormy conditions are possible in the polar cap, auroral, and sub-auroral zones.

Note that in some situations the selection may be left blank.

## 2.1. Summary / Résumé

<b>major storm watch / veille d'orage majeur</b>	<p>A major storm WATCH is in effect for the (auroral zone / polar cap, auroral, and sub-auroral zones) from DD MMM YYYY HH:MM UT to DD MMM YYYY HH:MM UT.</p> <p>A major storm WATCH is in effect for the (auroral zone / polar cap, auroral, and sub-auroral zones), and is anticipated to end DD MMM YYYY HH:MM UT.</p> <p>The major storm WATCH issued DD MMM YYYY HH:MM UT for the (auroral zone / polar cap, auroral, and sub-auroral zones) has been extended to DD MMM YYYY HH:MM UT.</p> <p>The major storm WATCH issued DD MMM YYYY HH:MM UT for the (auroral zone / polar cap, auroral, and sub-auroral zones) ended DD MMM YYYY HH:MM UT.</p> <p>There is currently no major storm watch in effect.</p>	<p>Une VEILLE d'orage majeur est en vigueur pour (la zone aurorale / les zones de la calotte polaire, aurorale et sub-aurorale) du DD MMM YYYY HH:MM TU au DD MMM YYYY HH:MM TU.</p> <p>Une VEILLE d'orage majeur est en vigueur pour (la zone aurorale / les zones de la calotte polaire, aurorale et sub-aurorale), et devrait se terminer le DD MMM YYYY HH:MM TU.</p> <p>La VEILLE d'orage majeur émise le DD MMM YYYY HH:MM TU pour (la zone aurorale / les zones de la calotte polaire, aurorale et sub-aurorale) a été prolongée jusqu'au DD MMM YYYY HH:MM TU.</p> <p>La VEILLE d'orage majeur émise le DD MMM YYYY HH:MM TU pour (la zone aurorale / les zones de la calotte polaire, aurorale et sub-aurorale) s'est terminée le DD MMM YYYY HH:MM TU.</p> <p>Actuellement, aucune veille d'orage majeur n'est pas en vigueur.</p>
<b>stormy conditions / conditions orageuses</b>	<p>(Stormy / Major storm) conditions are possible in the (polar cap / auroral / and sub-auroral) (zone / zones) within the next 24 hours.</p> <p>(Stormy / Major storm) conditions are (possible / expected) from DD MMM YYYY HH:MM UT to DD MMM YYYY HH:MM for the (polar cap / auroral / and sub-auroral) zone(s).</p> <p>(Stormy / Major storm) conditions are currently observed in the (polar cap / auroral / and sub-auroral) (zone / zones).</p> <p>(Stormy / Major storm) conditions expected from DD MMM YYYY HH:MM UT to DD MMM YYYY HH:MM UT for the (auroral zone / polar cap, auroral, and sub-auroral zones) did not occur.</p>	<p>Des conditions (orageuses / d'orage majeur) sont possibles dans (la zone / les zones) (de la calotte polaire / aurorale / et sub-aurorale) au cours des 24 prochaines heures.</p> <p>Des conditions (orageuses / d'orage majeur) sont (possibles / prévues) du DD MMM YYYY HH:MM TU au DD MMM YYYY HH:MM TU pour (la zone / les zones) (de la calotte polaire / aurorale / et sub-aurorale).</p> <p>Des conditions (orageuses / d'orage majeur) sont actuellement observées dans (la zone / les zones) (de la calotte polaire / aurorale / et sub-aurorale).</p> <p>Les conditions (orageuses / d'orage majeur) prévues du DD MMM YYYY HH:MM TU au DD MMM YYYY HH:MM TU pour (la zone aurorale / les zones de la calotte polaire, aurorale et sub-aurorale) ne sont pas survenues.</p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">disturbed conditions / perturbations</p>	<p>Disturbed geomagnetic conditions due to solar activity observed on DD MMM YYYY are not expected.</p> <p>Disturbed geomagnetic conditions due to solar activity are expected to be observed on the Earth between DD MMM YYYY and DD MMM YYYY.</p> <p>Disturbed geomagnetic conditions due to solar activity are expected today.</p> <p>Disturbed geomagnetic conditions due to solar activity are currently observed in the (polar cap / auroral / and sub-auroral) (zone / zones).</p>	<p>On ne prévoit aucune perturbation géomagnétique résultant de l'activité solaire observée le DD MMM YYYY.</p> <p>Des perturbations géomagnétiques causées par l'activité solaire devraient être observées sur la Terre entre le DD MMM YYYY et le DD MMM YYYY.</p> <p>Des perturbations géomagnétiques causées par l'activité solaire sont prévues aujourd'hui.</p> <p>Des perturbations géomagnétiques causées par l'activité solaire sont observées actuellement dans (la zone / les zones) (de la calotte polaire / aurorale / et sub-aurorale).</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">ionosphere / ionosphère</p>	<p>(An ionospheric / A polar cap) absorption event is currently in progress in the (polar cap / auroral / and sub-auroral) (zone / zones).</p> <p>The (ionospheric / polar cap) absorption event reported yesterday has ended.</p> <p>(An ionospheric / A polar cap) absorption event is currently not in effect.</p> <p>(An ionospheric / A polar cap) absorption event is possible.</p> <p>An (ionospheric / polar cap) absorption event is currently in progress for the (polar cap / auroral / and sub-auroral) zone(s) from DD MMM YYYY HH:MM UT to DD MMM YYYY HH:MM UT.</p> <p>An (ionospheric / polar cap) absorption event is currently in progress for the (polar cap / auroral / and sub-auroral) zone(s), and is anticipated to end at DD MMM YYYY HH:MM UT.</p> <p>The (ionospheric / polar cap) absorption event that began DD MMM YYYY HH:MM UT in the (polar cap / auroral / and sub-auroral) zone(s) has been extended to DD MMM YYYY HH:MM UT.</p>	<p>Un épisode d'absorption (ionosphérique / dans la calotte polaire) est en cours dans (la zone / les zones) (de la calotte polaire / aurorale / et sub-aurorale).</p> <p>L'épisode d'absorption (ionosphérique / dans la calotte polaire) signalé hier est terminé.</p> <p>Aucun épisode d'absorption (ionosphérique / dans la calotte polaire) n'est en cours actuellement.</p> <p>Un épisode d'absorption (ionosphérique / dans la calotte polaire) est possible.</p> <p>Un épisode d'absorption (ionosphérique / dans la calotte polaire) en cours est signalé pour (la zone / les zones) (de la calotte polaire / aurorale / et sub-aurorale) du DD MMM YYYY HH:MM TU au DD MMM YYYY HH:MM TU.</p> <p>Un épisode d'absorption (ionosphérique / dans la calotte polaire) en cours est signalé pour (la zone / les zones) (de la calotte polaire / aurorale / et sub-aurorale) et devrait se terminer le DD MMM YYYY HH:MM TU.</p> <p>L'épisode d'absorption (ionosphérique / dans la calotte polaire) qui a commencé le DD MMM YYYY HH:MM TU dans (la zone / les zones) (de la calotte polaire / aurorale / et sub-aurorale) est perdurer jusqu'au DD MMM YYYY HH:MM TU.</p>

	<p>The (ionospheric / polar cap) absorption event that began DD MMM YYYY HH:MM UT in the (polar cap / auroral / and sub-auroral) zone(s) ended DD MMM YYYY HH:MM UT.</p> <p>The (ionospheric / polar cap) absorption event expected from DD MMM YYYY HH:MM UT to DD MMM YYYY HH:MM UT for the (polar cap / auroral / and sub-auroral) zone(s) did not occur.</p>	<p>L'épisode d'absorption (ionosphérique / dans la calotte polaire) qui a commencé le DD MMM YYYY HH:MM TU dans (la zone / les zones) (de la calotte polaire / aurorale / et sub-aurorale) s'est terminé le DD MMM YYYY HH:MM TU.</p> <p>L'épisode d'absorption (ionosphérique / dans la calotte polaire) prévu du DD MMM YYYY HH:MM TU au DD MMM YYYY HH:MM TU pour (la zone / les zones) (de la calotte polaire / aurorale / et sub-aurorale) ne s'est pas produit.</p>
solar activity / activité solaire	<p>(An / A) (slow / moderate / fast) Earth-directed CME has erupted over the past 24 hours.</p> <p>(Two / Three / Several) (slow / moderate / fast) Earth-directed CMEs have erupted over the past 24 hours.</p> <p>A (medium / large / medium to large) (long duration) solar x-ray flare has erupted over the past 24 hours.</p> <p>(Two / Three / Several) (medium / large / medium to large) (long duration) solar x-ray flares have erupted over the past 24 hours.</p> <p>CMEs may be associated with these flares.</p>	<p>Une EMC (lente / modérée / rapide) dirigée vers la Terre a eu lieu au cours des 24 dernières heures.</p> <p>(Deux / Trois / Plusieurs) EMC (lents / modérés / rapides) dirigées vers la Terre ont eu lieu au cours des 24 dernières heures.</p> <p>Une éruption solaire (moyenne / forte / moyenne à forte) (de longue durée) avec émission de rayons X a eu lieu au cours des 24 dernières heures.</p> <p>(Deux / Trois / Plusieurs) éruptions solaires (moyennes / fortes / moyennes à fortes) (de longue durée) avec émission de rayons X ont eu lieu au cours des 24 dernières heures.</p> <p>Des EMC peuvent être associées à ces éruptions.</p>
linking statements / énoncés complémentaires	<p>The major storm WATCH issued DD MMM YYYY HH:MM UT for the (auroral zone / polar cap, auroral, and sub-auroral zones) ended DD MMM YYYY HH:MM UT.</p> <p>(Disturbed / Stormy / Major storm) conditions observed DD MMM YYYY in the (polar cap / auroral / and sub-auroral) (zone / zones) have ended.</p> <p>(An / A) (slow/moderate/fast) Earth-directed CME erupted on DD MMM YYYY HH:MM UT (and is expected to reach the Earth on DD MMM YYYY)(, resulting in increased / disturbed geomagnetic activity).</p>	<p>La VEILLE d'orage majeur émise le DD MMM YYYY HH:MM TU pour (la zone aurorale / les zones de la calotte polaire, aurorale et sub-aurorale) s'est terminée le DD MMM YYYY HH:MM TU.</p> <p>Les conditions (perturbées / orageuses / d'orage majeur) observées le DD MMM YYYY dans (la zone / les zones) (de la calotte polaire / aurorale / et sub-aurorale) sont terminées.</p> <p>Une EMC (lente / modérée / rapide) en direction de la Terre a eu lieu le DD MMM YYYY à HH:MM TU (et devrait atteindre la Terre le DD MMM YYYY) (, provoquant une augmentation / perturbation de l'activité géomagnétique).</p>

linking statements / énoncés complémentaires	<p>(Two / Three / Several) (slow / moderate / fast) Earth-directed CMEs erupted on DD MMM YYYY at HH:MM UT, HH:MM UT, ..., and HH:MM UT (and are expected to reach the Earth on DD MMM YYYY) (, resulting in increased/disturbed geomagnetic activity).</p> <p>A (slow/moderate/fast) CME was observed on DD MMM YYYY, and is expected to deliver a glancing blow to the Earth on DD MMM YYYY (, resulting in increased/disturbed geomagnetic activity).</p> <p>(Two / Three / Several) (slow / moderate / fast) CMEs were observed on DD MMM YYYY, and are expected to deliver a glancing blow to the Earth on DD MMM YYYY (, resulting in increased / disturbed geomagnetic activity).</p> <p>Disturbed geomagnetic conditions are expected DD MMM YYYY to DD MMM YYYY due to high speed streams from coronal holes.</p>	<p>(Deux/Trois/Plusieurs) EMC (lents / modérés / rapides) en direction de la Terre ont eu lieu le DD MMM YYYY à HH:MM TU, HH:MM TU, ..., et HH:MM TU (et devraient atteindre la Terre le DD MMM YYYY) (, provoquant une augmentation / perturbation de l'activité géomagnétique).</p> <p>Une EMC (lente / modérée / rapide) a été observée le DD MMM YYYY, et devrait toucher la Terre obliquement le DD MMM YYYY (, provoquant une augmentation/perturbation de l'activité géomagnétique).</p> <p>(Deux/Trois/Plusieurs) EMC (lents / modérés / rapides) ont été observées le DD MMM YYYY, et devraient toucher la Terre obliquement le DD MMM YYYY (, provoquant une augmentation/perturbation de l'activité géomagnétique).</p> <p>Des perturbations géomagnétiques sont prévues du DD MMM YYYY au DD MMM YYYY en raison de flux à grande vitesse provenant de trous coronaux.</p>
other \ autre	<p>Possibility of impacts to (power systems / radio systems / satellites / aeromagnetic surveys / and directional drilling.</p> <p>See our website for current geomagnetic conditions:  <a href="http://www.spaceweather.gc.ca">http://www.spaceweather.gc.ca</a>  (updated every 15 minutes)</p>	<p>Possibilité de répercussions sur les (réseaux d'électricité / systèmes radio / satellites / levés aéromagnétiques / et forages dirigés).</p> <p>Veuillez consulter notre site Web pour connaître les conditions géomagnétiques actuelles :  <a href="http://www.spaceweather.gc.ca">http://www.spaceweather.gc.ca</a>  (actualisées toutes les 15 minutes)</p>

## 2.2. Current conditions (HH:MM UT) / Conditions actuelles (HH:MM TU)

### 2.2.1. Geomagnetic activity / activité géomagnétique

<p>polar cap zone: (quiet / unsettled / active / stormy / major storm / unavailable)</p> <p>auroral zone: (quiet / unsettled / active / stormy / major storm / unavailable)</p> <p>sub-auroral zone: (quiet / unsettled / active / stormy / major storm / unavailable)</p>	<p>calotte polaire : (calme / agitée / active / orageuse / orage majeur / non disponible)</p> <p>zone aurorale : (calme / agitée / active / orageuse / orage majeur / non disponible)</p> <p>zone sub-aurorale : (calme / agitée / active / orageuse / orage majeur / non disponible)</p>
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### 2.2.2. Environment at geostationary orbit / Environnement à l'orbite géostationnaire

energetic electron fluence at geostationary orbit: (low / normal / moderate / high / very high / unavailable)	fluence des électrons énergétiques en orbite géostationnaire : (faible / normale / modérée / élevée / très élevée / non disponible)
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### 2.2.3. Possible impacts on technology / Effets possibles sur la technologie

<p>Power Systems: (Possibility of weak voltage fluctuations / Geomagnetically induced currents may cause misoperation of protective relays and transformer heating) in the (polar cap / auroral / and sub-auroral) zone(s).</p> <p>HF radio: Ionospheric and polar cap absorption events may affect radio communications for transpolar flights and other arctic operations.</p> <p>Geostationary satellites: (Moderate risk of internal charging / High risk of internal charging / Very high risk of internal charging).</p> <p>Aeromagnetic surveys: (Potential for disruptions / Potential for significant disruptions / Potential for severe disruptions) in the (polar cap / auroral / and sub-auroral) zone(s).</p> <p>Directional Drilling: (Potential for deviations / Potential for significant deviations / Potential for sever deviations) in the (polar cap / auroral / and sub-auroral) zone(s).</p> <p>Impacts are not expected.</p>	<p>Réseaux d'électricité : (Possibilité de faibles variations de tension / Des courants induits géomagnétiquement peuvent entraîner un mauvais fonctionnement des relais de protection et un échauffement des transformateurs) dans (la zone / les zones) (de la calotte polaire / aurorale / et sub-aurorale).</p> <p>Radiocommunications HF : Des épisodes d'absorption ionosphérique et dans la calotte glaciaire peuvent avoir des effets sur les radiocommunications pour les vols transpolaires et d'autres opérations dans l'Arctique.</p> <p>Satellites géostationnaires : (Risque modéré de charge électrostatique interne / Risque élevé de charge électrostatique interne / Risque très élevé de charge électrostatique interne).</p> <p>Levés aéromagnétiques : (Possibilité de perturbations / Possibilité de perturbations importantes / Possibilité de graves perturbations) dans (la zone / les zones) (de la calotte polaire / aurorale / et sub-aurorale).</p> <p>Forages dirigés : (Possibilité de déviations / Possibilité de perturbations déviations / Possibilité de graves déviations) dans (la zone / les zones) (de la calotte polaire / aurorale / et sub-aurorale).</p> <p>Aucune répercussion n'est prévue.</p>
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## 2.3. 24 hour forecast / Prévisions de 24 heures

### 2.3.1. Geomagnetic activity / activité géomagnétique

polar cap zone: (quiet / unsettled / active / stormy / major storm / unavailable) (with quiet / unsettled / active / stormy / major storm intervals)	zone de la calotte polaire : (calme / agitée / active / orageuse / orage majeur / non disponible) (avec des périodes calmes / agitées / actives / orageuses / d'orage majeur)
auroral zone: (quiet / unsettled / active / stormy / major storm / unavailable) (with unsettled / active / stormy / major storm intervals)	zone aurorale : (calme / agitée / active / orageuse / orage majeur / non disponible) (avec des périodes agitées / actives / orageuses / d'orage majeur)
sub-auroral zone: (quiet / unsettled / active / stormy / major storm / unavailable) (with unsettled / active / stormy / major storm intervals)	zone sub-aurorale : (calme / agitée / active / orageuse / orage majeur / non disponible) (avec des périodes agitées / actives / orageuses / d'orage majeur).

### 2.3.2. Environment at geostationary orbit / Environnement à l'orbite géostationnaire

energetic electron fluence at geostationary orbit: (Low / Normal / Moderate / High / Very High / unavailable)	fluence des électrons énergétiques en orbite géostationnaire : (faible / normale / modérée / élevée / très élevée / non disponible)
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### 2.3.3. Possible impacts on technology / Effets possibles sur la technologie

The choice of statements for the possible impacts on technology in the *24 hour forecast* part of the bulletin are the same as in the section for the *current conditions* (see section 3.2).

## 2.4. Additional information / Information supplémentaire

Additional information at <a href="http://www.spaceweather.gc.ca">http://www.spaceweather.gc.ca</a> Updated conditions and forecast; Background information; FAQ, Glossary of terms, and potential impacts.	Information supplémentaire à <a href="http://www.spaceweather.gc.ca">http://www.spaceweather.gc.ca</a> Conditions et prévisions actualisées; Renseignements généraux; FAQ, Glossaire et effets possibles.
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## 2.5. Detailed information / Information détaillée

### 2.5.1. Solar / Solaire

<p>general / généralités</p>	<p>Solar activity has been (very low / low / moderate / high / very high). Data about solar conditions are currently unavailable.</p>	<p>L'activité solaire a été (très faible / faible / modérée / élevée / très élevée). Les données sur les conditions solaires ne sont pas disponibles à l'heure actuelle.</p>
<p>active regions / régions actives</p>	<p>(There is one active region / There are xx active regions / There are several active regions) visible on the solar disk. The active region located near the (east limb / central region / west limb) of the solar disk has produced a (solar x-ray flare / long duration solar x-ray flare) (and an associated CME) (and has the potential to produce subsequent solar eruptions).  The active region located near the (east limb / central region / west limb) of the solar disk has produced (solar x-ray flares / long duration solar x-ray flares) (and an associated CME / and associated CMEs) (and has the potential to produce subsequent solar eruptions).</p>	<p>(Il y a une région active / Il y a xx régions actives / Il y a plusieurs régions actives) (visible / visibles) sur le disque solaire. La région active située près (du bord est / de la région centrale / du bord ouest) du disque solaire a produit une (éruption solaire avec émission de rayons X / éruption solaire de longue durée avec émission de rayons X) (et une EMC associée) (et pourrait produire des éruptions solaires subséquentes).  La région active située près (du bord est / de la région centrale / du bord ouest) du disque solaire a produit des (éruptions solaires avec émission de rayons X / éruptions solaires de longue durée avec émission de rayons X) (et une EMC associée / et des EMC associées) (et pourrait produire des éruptions solaires subséquentes).</p>
<p>CME / EMC</p>	<p>(An / A) (slow/moderate/fast) Earth-directed CME erupted on DD MMM YYYY HH:MM UT (and is expected to reach the Earth on DD MMM YYYY), resulting in increased/disturbed geomagnetic activity).</p>	<p>Une EMC (lente / modérée / rapide) en direction de la Terre a eu lieu le DD MMM YYYY HH:MM TU (et devrait atteindre la Terre le DD MMM YYYY) (, provoquant une augmentation/perturbation de l'activité géomagnétique).</p>

CME / EMC	<p>(Two/Three/Several) (slow/moderate/fast) Earth-directed CMEs erupted on DD MMM YYYY at HH:MM UT, HH:MM UT, ..., and HH:MM UT (and are expected to reach the Earth on DD MMM YYYY) (, resulting in increased/disturbed geomagnetic activity).</p> <p>A (slow/moderate/fast) CME was observed on DD MMM YYYY, and is expected to deliver a glancing blow to the Earth on DD MMM YYYY (, resulting in increased/disturbed geomagnetic activity).</p> <p>(Two / Three / Several) (slow / moderate / fast) CMEs were observed on DD MMM YYYY, and are expected to deliver a glancing blow to the Earth on DD MMM YYYY (, resulting in increased/disturbed geomagnetic activity).</p> <p>A (slow/moderate/fast) non-Earth-directed CME erupted on DD MMM YYYY HH:MM UT.</p> <p>(Two / Three / Several) (slow / moderate / fast) non-Earth-directed CMEs erupted on DD MMM YYYY at HH:MM UT, HH:MM UT, ..., and HH:MM UT.</p> <p>A (slow / moderate / fast) CME erupted on DD MMM YYYY HH:MM UT. It is not yet known if the CME will impact the Earth.</p> <p>(Two / Three / Several) (slow / moderate / fast) CMEs erupted on DD MMM YYYY at HH:MM UT, HH:MM UT, ..., and HH:MM UT. It is not yet known if the CMEs will impact the Earth.</p>	<p>(Deux/Trois/Plusieurs) EMC (lents / modérés / rapides) en direction de la Terre ont eu lieu le DD MMM YYYY à HH:MM TU, HH:MM TU, ..., et HH:MM TU (et devraient atteindre la Terre le DD MMM YYYY) (, provoquant une augmentation / perturbation de l'activité géomagnétique).</p> <p>Une EMC (lente / modérée / rapide) a été observée le DD MMM YYYY, et devrait toucher la Terre obliquement le DD MMM YYYY (, provoquant une augmentation/perturbation de l'activité géomagnétique).</p> <p>(Deux/Trois/Plusieurs) EMC (lents / modérés / rapides) ont été observées le DD MMM YYYY, et devraient toucher la Terre obliquement le DD MMM YYYY (, provoquant une augmentation/perturbation de l'activité géomagnétique).</p> <p>Une EMC (lente / modérée / rapide) non dirigée vers la Terre a eu lieu le DD MMM YYYYHH:MM TU.</p> <p>(Deux/Trois/Plusieurs) EMC (lents / modérés / rapides) non dirigées vers la Terre ont eu lieu le DD MMM YYYY à HH:MM TU, HH:MM TU, ..., et HH:MM TU.</p> <p>Une EMC (lente / modérée / rapide) a eu lieu le DD MMM YYYY HH:MM TU. On ne sait pas encore si l'EMC touchera la Terre.</p> <p>(Deux/Trois/Plusieurs) EMC (lents / modérés / rapides) ont eu lieu le DD MMM YYYY à HH:MM TU, HH:MM TU, ..., et HH:MM TU. On ne sait pas encore si les EMC toucheront la Terre.</p>
coronal hole / trou coronal	<p>One (small / medium / large) coronal hole (elongated in longitude) is located near the (centre / edge) of the solar disk.</p> <p>(Two / Three / Four / Five / Six) (small / medium / large) coronal holes (elongated in longitude) are located near the (centre / edge) of the solar disk.</p>	<p>Un (petit / moyen / grand) trou coronal (étendu en longitude) est situé près du (centre / bord) du disque solaire.</p> <p>(Deux / Trois / Quatre / Cinq / Six) (petits / moyens / grands) trous coronaux (étendus en longitude) sont situés près du (centre / bord) du disque solaire.</p>

solar flare / éruption solaire	<p>An (M (medium) / X (large)) solar x-ray flare erupted DD MMM YYYY HH:MM UT.</p> <p>An (M (medium) / X (large)) solar x-ray flare erupted DD MMM YYYY HH:MM UT near the (centre / edge) of the solar disk.</p> <p>(Two / Three / Four / Five / Six / Seven / Eight / Nine / Ten / Several) (M (medium) / X (large)) solar x-ray flares have erupted over the past 24 hours.</p> <p>A long duration (C (low) / M (medium) / X (large)) solar x-ray flare erupted at DD MMM YYYY HH:MM UT near the (centre / edge) of the solar disk.</p>	<p>Une éruption solaire (M (moyenne) / X (forte)) avec émission de rayons X a eu lieu le DD MMM YYYY HH:MM TU.</p> <p>Une éruption solaire (M (moyenne) / X (forte)) avec émission de rayons X a eu lieu le DD MMM YYYY HH:MM TU près du (centre / bord) du disque solaire.</p> <p>(Deux / Trois / Quatre / Cinq / Six / Sept / Huit / Neuf / Dix / Plusieurs) éruptions solaires (M (moyennes) / X (fortes)) avec émission de rayons X ont eu lieu au cours des 24 dernières heures.</p> <p>Une éruption solaire (C (faible) / M (moyenne) / X (forte)) de longue durée avec émission de rayons X a eu lieu le DD MMM YYYY HH:MM TU près du (centre / bord) du disque solaire.</p>
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### 2.5.2. Interplanetary / Interplanétaire

general / généralités	<p>Interplanetary activity has been (very low / low / moderate / high / very high). Data about interplanetary conditions are currently unavailable.</p>	<p>L'activité interplanétaire a été (très faible / faible / modérée / élevée / très élevée). Les données sur les conditions interplanétaires ne sont pas disponibles à l'heure actuelle.</p>
solar wind speed / vitesse du vent solaire	<p>The solar wind speed is currently (very slow (&lt;400 km/s) / slow (400-500 km/s) / moderate (500-700 km/s) / fast 700-1000 km/s) / very fast (&gt;1000 km/s). The solar wind speed has been (increasing / decreasing) over the last (hour / xx hours) (currently ~ xx km/s).</p> <p>(Moderate / fast) solar wind speeds are due to (high speed streams from coronal holes / a CME observed at DD MMM YYYY HH:MM UT).</p> <p>The solar wind speed has been at xx km/s since the passage of an interplanetary shock DD MMM YYYY at HH:MM UT.</p>	<p>Le vent solaire est actuellement (très lent (&lt;400 km/s) / lent (400 à 500 km/s) / modéré (500 à 700 km/s) / rapide (700 à 1000 km/s) / très rapide (&gt;1000 km/s)). La vitesse du vent solaire a (augmenté / diminué) au cours (de la dernière heure / des xx dernières heures) (actuellement ~ xx km/s).</p> <p>Les vitesses de vent solaire (modéré / rapide) sont attribuables à (des flux à grande vitesse provenant de trous coronaux / une EMC observée le DD MMM YYYY HH:MM TU).</p> <p>La vitesse du vent solaire se situait à xx km/s depuis le passage d'un choc interplanétaire le DD MMM YYYY à HH:MM TU.</p>

IMF / CMI	<p>The interplanetary magnetic field has been fluctuating at (very low (<math> B_z  &lt; 2</math> nT) / low (<math> B_z  &lt; 5</math> nT) / moderate (<math> B_z  &lt; 10</math> nT) / high (<math> B_z  &lt; 20</math> nT) / very high (<math> B_z  &gt; 20</math> nT)) levels.</p> <p>The interplanetary magnetic field has been primarily (positive / negative) at (very low (<math> B_z  &lt; 2</math> nT) / low (<math>2 &lt;  B_z  &lt; 5</math> nT) / moderate (<math>5 &lt;  B_z  &lt; 10</math> nT) / high (<math>10 &lt;  B_z  &lt; 20</math> nT) / very high (<math> B_z  &gt; 20</math> nT)) levels.</p> <p>The interplanetary magnetic field currently has <math>B_z = (+ / -)</math> xx nT.</p> <p>Prolonged periods of negative interplanetary magnetic field are often associated with increased geomagnetic activity.</p>	<p>Le champ magnétique interplanétaire a fluctué à des niveaux (très faibles (<math> B_z  &lt; 2</math> nT) / faibles (<math> B_z  &lt; 5</math> nT) / modérés (<math> B_z  &lt; 10</math> nT) / élevés (<math> B_z  &lt; 20</math> nT) / très élevés (<math> B_z  &gt; 20</math> nT)).</p> <p>Le champ magnétique interplanétaire a été généralement (positif / négatif) à des niveaux (très faibles (<math> B_z  &lt; 2</math> nT) / faibles (<math>2 &lt;  B_z  &lt; 5</math> nT) / modérés (<math>5 &lt;  B_z  &lt; 10</math> nT) / élevés (<math>10 &lt;  B_z  &lt; 20</math> nT) / très élevés (<math> B_z  &gt; 20</math> nT)).</p> <p>Actuellement, le champ magnétique interplanétaire a une valeur de <math>B_z = (+ / -)</math> xx nT.</p> <p>Les périodes prolongées de champ magnétique interplanétaire négatif sont souvent associées à une activité géomagnétique accrue.</p>
shock / choc	<p>An interplanetary shock has been observed on DD MMM YYYY HH:MM UT.</p>	<p>Un choc interplanétaire a été observé le DD MMM YYYY HH:MM TU.</p>
proton events / épisodes de protons solaires	<p>A solar energetic proton event started on DD MMM YYYY at HH:MM UT. Current levels are (normal / moderate / high / very high).</p>	<p>Un épisode de protons solaires de grande énergie a débuté le DD MMM YYYY à HH:MM TU. Les niveaux actuels sont (normaux / modérés / élevés / très élevés).</p>

### 2.5.3. Environment at geostationary orbit / Environnement à l'orbite géostationnaire

general / généralités	<p>Energetic electron fluence at geostationary orbit was at a (low / normal / moderate / high / very high) level yesterday and is expected to be at a (low / normal / moderate / high / very high) level tomorrow.</p> <p>The 5-minute integral energetic electron flux is currently high.</p> <p>Data about conditions in the environment at geostationary orbit are currently unavailable.</p> <p>Visit <a href="http://www.spaceweather.gc.ca/sffl-eng.php">http://www.spaceweather.gc.ca/sffl-eng.php</a> for the electron forecast.</p>	<p>La fluence des électrons énergétiques en orbite stationnaire était à un niveau (faible / normale / modéré / élevée / très élevée) hier et devrait être à un niveau (faible / normale / modéré / élevée / très élevée) demain.</p> <p>Actuellement, le flux intégral d'électrons énergétiques sur une période de cinq minutes est élevé.</p> <p>Les données sur les conditions dans l'environnement à l'orbite géostationnaire ne sont pas disponibles à l'heure actuelle.</p> <p>Consultez les prévisions sur la fluence des électrons à l'adresse <a href="http://www.spaceweather.gc.ca/sffl-fra.php">http://www.spaceweather.gc.ca/sffl-fra.php</a>.</p>
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### 2.5.4. Geomagnetic / Géomagnétique

general / généralités	<p>Over the last 24 hours geomagnetic activity has been (quiet / unsettled / active / stormy / major storm) (with unsettled / active / stormy / major storm intervals) in the polar zone, (quiet / unsettled / active / stormy / major storm) (with unsettled / active / stormy / major storm intervals) in the auroral zone, and (quiet / unsettled / active / stormy / major storm) (with unsettled / active / stormy / major storm intervals) in the subauroral zone.</p> <p>Over the next 24 hours geomagnetic activity is forecast to be (quiet / unsettled / active / stormy / major storm) (with unsettled / active / stormy / major storm intervals) in the polar zone, (quiet / unsettled / active / stormy / major storm) (with unsettled / active / stormy / major storm intervals) in the auroral zone, and (quiet / unsettled / active / stormy / major storm) (with unsettled / active / stormy / major storm intervals) in the subauroral zone.</p>	<p>Au cours des 24 dernières heures, l'activité géomagnétique était (calme / agitée / active / orageuse / celle d'un orage majeur) (avec des périodes agitées / actives / orageuses / d'orage majeur) dans la zone polaire, (calme / agitée / active / orageuse / celle d'un orage majeur) (avec des périodes agitées / actives / orageuses / d'orage majeur) dans la zone aurorale, et (calme / agitée / active / orageuse / celle d'un orage majeur) (avec des périodes agitées / actives / orageuses / d'orage majeur) dans la zone sub-aurorale.</p> <p>Au cours des 24 prochaines heures, l'activité géomagnétique devrait être (calme / agitée / active / orageuse / celle d'un orage majeur) (avec des périodes agitées / actives / orageuses / d'orage majeur) dans la zone polaire, (calme / agitée / active / orageuse / celle d'un orage majeur) (avec des périodes agitées / actives / orageuses / d'orage majeur) dans la zone aurorale, et (calme / agitée / active / orageuse / celle d'un orage majeur) (avec des périodes agitées / actives / orageuses / d'orage majeur) dans la zone sub-aurorale.</p>
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<p style="writing-mode: vertical-rl; transform: rotate(180deg);">general / généralités</p>	<p>Enhanced geomagnetic activity (<i>is / was</i>) likely associated with the arrival of a CME from <b>DD MMM YYYY HH:MM</b> UT which arrived at the Earth at <b>DD MMM YYYY HH:MM</b> UT.</p> <p>Enhanced geomagnetic activity (<i>is/was</i>) likely due to the arrival of a high speed stream associated with coronal holes.</p> <p>Visit <a href="http://www.spaceweather.gc.ca/sfst-1-eng.php">http://www.spaceweather.gc.ca/sfst-1-eng.php</a> for the magnetic forecast.</p> <p>Data about geomagnetic conditions are currently unavailable.</p> <p>Data about geomagnetic conditions in the (<i>polar cap / auroral / and sub-auroral</i>) (<i>zone / zones</i>) are currently unavailable.</p>	<p>L'augmentation de l'activité géomagnétique (<i>est / était</i>) probablement liée à l'arrivée d'un EMC qui a fait éruption le <b>DD MMM YYYY</b> à <b>HH:MM</b> TU et atteint la Terre le <b>DD MMM YYYY</b> à <b>HH:MM</b> TU.</p> <p>L'augmentation de l'activité géomagnétique (<i>est / était</i>) due à l'arrivée d'un flux à grande vitesse associée à des trous coronaux.</p> <p>Consultez les prévisions sur l'activité magnétique à l'adresse <a href="http://www.spaceweather.gc.ca/sfst-1-fra.php">http://www.spaceweather.gc.ca/sfst-1-fra.php</a>.</p> <p>Les données sur les conditions géomagnétiques ne sont pas disponibles à l'heure actuelle.</p> <p>Les données sur les conditions géomagnétiques dans (<i>la zone / les zones</i>) (<i>de la calotte polaire / aurorale / et sub-aurorale</i>) ne sont pas disponibles à l'heure actuelle.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">impulse / impulsion</p>	<p>A geomagnetic sudden impulse due to a shock in the solar wind was observed on <b>DD MMM YYYY HH:MM</b> UT.</p>	<p>Une impulsion géomagnétique brusque attribuable à une onde de choc du vent solaire a été observée le <b>DD MMM YYYY HH:MM</b> TU.</p>

## 2.6. Signature

<p>Space weather scientist  <b>Name</b>          Canadian Space Weather Forecast Centre          Canadian Hazard Information Service          Natural Resources Canada          2617 Anderson Road, Ottawa ON K1A 0E7  <b>email address</b> (preferred method of contact)          Telephone: <b>(613) 837-xxxx</b>          Government of Canada</p>	<p>Spécialiste en météorologie spatiale  <b>Nom</b>          Centre canadien de météo spatiale          Service canadien d'information sur les risques          Ressources naturelles Canada          2617, chemin Anderson, Ottawa (Ontario) K1A 0E7  <b>adresse courriel</b> (méthode préférée de contact)          Téléphone : <b>613-837-xxxx</b>          Gouvernement du Canada</p>
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### 3. Possible impacts on technology

Space weather may impact various ground-based and space-based technologies and infrastructure. This section lists possible impacts based on geomagnetic activity level, ionospheric conditions, and the geostationary satellite environment.

It is important to acknowledge that although impacts are possible, they are not guaranteed. Possible impacts listed in the tables below represent reasonable expectations based on current and forecasted conditions. However, system impacts may be felt at times other than those listed in the bulletin due to, for example, other system limitations unknown to the duty forecaster or spontaneous activity.

#### 3.1. Geomagnetic activity level

**Table 1:** Possible impacts to power systems, aeromagnetic surveys, and directional drilling based on geomagnetic activity levels.

Activity Level	System	Possible Impact
Quiet	Power Systems:	Impacts are not expected
	Aeromagnetic surveys:	Impacts are not expected
	Directional Drilling:	Impacts are not expected
Unsettled	Power Systems:	Impacts are not expected
	Aeromagnetic surveys:	Impacts are not expected
	Directional Drilling:	Impacts are not expected
Active	Power Systems:	Impacts are not expected
	Aeromagnetic surveys:	Potential for disruptions
	Directional Drilling:	Potential for deviations
Stormy	Power Systems:	Possibility of weak voltage fluctuations <sup>6</sup>
	Aeromagnetic surveys:	Potential for significant disruptions
	Directional Drilling:	Potential for significant deviations
Major Storm	Power Systems:	Geomagnetically induced currents may cause misoperation of protective relays and transformer heating
	Aeromagnetic surveys:	Potential for severe disruptions
	Directional Drilling:	Potential for severe deviations

<sup>6</sup> Although these fluctuations are likely to be observed, they are in general within normal operating parameters and do not cause problems with the proper operation of the power system. It is possible that for some isolated cases, specific locations, or specific systems, fluctuations might move out of the range of what is acceptable.

### 3.2. Ionosphere

**Table 2:** Possible impacts to HF radio communication based on ionospheric conditions.

Activity Level	GOES 10 MeV protons	Possible Impacts
minor PCA event	above 10 pfu	(Statement used at discretion of DF) Ionospheric and polar cap absorption events may affect radio communications for transpolar flights and other arctic operations.
PCA event	above 100 pfu	Ionospheric and polar cap absorption events may affect radio communications for transpolar flights and other arctic operations.

### 3.3. Environment at geostationary orbit

**Table 3:** Possible impacts to geostationary satellites based on the geostationary satellite environment.

Activity Level	System	Possible Impact
Low	Geostationary satellites:	No risk of internal charging
Normal	Geostationary satellites:	No risk of internal charging
Moderate	Geostationary satellites:	Moderate risk of internal charging
High	Geostationary satellites:	High risk of internal charging
Very High	Geostationary satellites:	Very high risk of internal charging

## 4. Tables of values – 2014

Various descriptive terms are used in the daily space weather bulletin to describe geomagnetic activity level, the environment at geostationary orbit, solar activity, and interplanetary conditions. This section describes these descriptive terms and the thresholds used to determine them.

### 4.1. Geomagnetic activity level

Geomagnetic activity is derived from measurements made at magnetic observatories located in the polar cap, auroral, and sub-auroral zones. The data are processed to produce an hourly range index to characterize the range of magnetic field variations measured during one hour at ground level. Hourly range indices are divided into 5 activity levels: classified as *quiet*, *unsettled*, *active*, *stormy*, and *major storm*<sup>7</sup>. Hourly range values corresponding to different activity levels depend on observatory locations and can be found at <http://www.spaceweather.gc.ca/current-actuelle/short-court/sfst-5-eng.php> by clicking on each observatory.

Geomagnetic activity levels described in *Current Conditions* and *24 Hour Forecast* are listed in Table 4.

**Table 4:** Terminology and quantitative description of geomagnetic activity level.

Geomagnetic Activity Level	Quiet	Unsettled	Active	Stormy	Major Storm
Kr index	0-3	3-4	4-5	5-7	7+

### 4.2. Environment at geostationary orbit

Descriptors for the environment at geostationary orbit are based on electron fluence. Electron fluence refers to the total number of energetic electrons with energies >2 MeV passing through a given area in a day. Electron fluence is measured in units of electrons per square centimetre per steradian per day (electrons/cm<sup>2</sup>-sr-day). To determine electron fluence over 1 day, flux measurements made at a geosynchronous orbit of 6.6 Earth radii are taken at 5 minute intervals and summed over a 24 hour period. The fluence value of 5.0×10<sup>7</sup> electrons/cm<sup>2</sup>-sr-day is considered as a threshold level for possible adverse space weather conditions hazardous to geostationary satellites.

Descriptors for the environment at geostationary orbit provided in *Current Conditions* and *24 Hour Forecast* are listed in Table 5.

**Table 5:** Terminology and quantitative description of the environment at geostationary orbit.

Space Environment	Low	Normal	Moderate	High	Very High
Electron Fluence (electrons / cm <sup>2</sup> -sr-day)	10 <sup>5</sup> < f < 10 <sup>6</sup>	10 <sup>6</sup> < f < 5×10 <sup>7</sup>	5×10 <sup>7</sup> < f < 5×10 <sup>8</sup>	5×10 <sup>8</sup> < f < 5×10 <sup>9</sup>	5×10 <sup>9</sup> < f

<sup>7</sup> Activity levels are assigned according to guidelines set by the CSWFC described at [www.spaceweather.gc.ca](http://www.spaceweather.gc.ca).

### 4.3. Solar activity

Under the *Solar* section of *Detailed Information* descriptors are used to characterize solar activity as *very low*, *low*, *moderate*, *high*, or *very high*. These descriptors are based on three kinds of solar phenomenon: coronal mass ejections, coronal holes, and solar flares (see Table 6).

Coronal mass ejections (CMEs) are ejections of plasma from the outermost region of the Sun's atmosphere called the corona. Their arrival at the Earth is the main cause for large geomagnetic disturbances. CMEs travel at speeds from ~400 to 2000 km/s, taking 1 to 4 days to reach the Earth. Although CMEs are an indicator of solar activity and can be ejected from any part of the Sun, only those directed toward the Earth will affect the Earth. Earth-directed CMEs (also called halo CMEs) have the largest influence on the Earth. Partially Earth-directed CMEs deliver a partial or 'glancing' blow to the Earth and have a lesser affect. The speed of a CME is a rough indicator of how strong the effects on the Earth will be; a slow-moving CME moving close to the background solar wind speed (300-400 km/s) will have less influence than a fast moving CME (>700 km/s).

Coronal holes are regions in the corona where magnetic field lines are open to space allowing high speed streams of plasma to escape from the Sun. When the high speed streams arrive at the Earth they can cause long lasting (3 or 4 days) periods of disturbed geomagnetic activity, particularly in the auroral zone. High speed streams from coronal holes that are extended in longitude can interact with the Earth for longer periods of time.

A solar flare is a burst of electromagnetic radiation across the electromagnetic spectrum, notably in visible light, and x-rays that can last from a few minutes to a few hours. Long duration flares can last for more than 3 hours. Solar x-ray flares are one indicator of possible solar plasma eruptions, and can be classified according to x-ray intensities into 4 categories: B (very low), C (low), M (medium), and X (large). Each category (except X) has 9 subdivisions ranging from, e.g., M1 to M9. The scaling is defined so that an M2 x-ray flare is twice as powerful as an M1 flare. X class flares >9 are possible.

**Table 6:** Criteria for describing solar activity level.

Very low	Low	Moderate	High	Very high
no coronal holes, flares, or CMEs detected	coronal holes	coronal holes	coronal holes	coronal holes
or	or	or	and/or	and
class A, B flares	class A, B, C flares	class M flares	class M, X flares	class M, X flares
	or	or	and/or	and
	CME activity	CME activity	CME activity	CME activity
		or	or	or
		long duration events	long duration events	long duration events

#### 4.4. Interplanetary conditions

Under the *Interplanetary* section of *Detailed Information* descriptors are used to characterize both the solar wind speed ( $v_{sw}$ ) and the interplanetary magnetic field (IMF) z-component ( $B_z$ ) as *very low*, *low*, *moderate*, *high*, or *very high*. These descriptors are based on the magnitude of  $v_{sw}$  and IMF  $B_z$ .

Table 7 provides criteria for determining which descriptor to use for interplanetary conditions.

**Table 7:** Criteria for describing interplanetary conditions.

	Very low	Low	Moderate	High	Very high
$v_{sw}$ (km/s)	$v_{sw} < 400$	$400 < v_{sw} < 500$	$500 < v_{sw} < 700$	$700 < v_{sw} < 1000$	$v_{sw} > 1000$
$B_z$ (nT)	$ B_z  < 2$	$2 <  B_z  < 5$	$5 <  B_z  < 10$	$10 <  B_z  < 20$	$ B_z  > 20$

Descriptors under the same section are also used to characterize the level of solar energetic protons as being *normal*, *moderate*, *high*, or *very high* based on the flux of solar energetic protons. Table 8 provides criteria for determining which descriptors to use.

**Table 8:** Criteria for describing for characterizing solar energetic proton events.

	Normal	Moderate	High	Very High
Flux of >10 MeV solar energetic protons (pfu)	$\leq 10$	$> 10$	$> 100$	$> 1000$

## 5. Twitter

In 2014 the CSWFC maintained an active Twitter account. The Twitter account is as follows:

<https://twitter.com/SpaceWeatherCA> (English)

<https://twitter.com/MeteoSpatialeCA> (French)

As of the generation of this report (05 MAR 2015) 634 tweets have been posted on the Twitter feed and the account has 1379 followers.

The Twitter feed is automatically updated based on current and forecasted conditions. Table 9 lists possible Twitter statements issued in 2014 and conditions of issuance in tabular format in both English and French.

**Table 9:** Possible Twitter statements (English and French), criteria for issuance, and frequency of evaluation.

	<b>English</b>	<b>French</b>	<b>Criteria</b>	<b>Frequency and Evaluation</b>
<b>1 Zone Storm Watch</b>	Major geomagnetic storm WATCH in effect: auroral zone until 5 Apr 21:00 UT <a href="http://goo.gl/UjJkmW">http://goo.gl/UjJkmW</a>	VEILLE d'orage géomagnétique majeur en vigueur: zone aurorale jusqu'au 5 AVR 21:00 TU <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>	Forecast system issues a one zone storm watch, and a storm watch IS NOT already in effect.  A three zone storm watch becomes a one zone storm watch.	Evaluate every 10 minutes. If a storm watch has been issued, then issue Twitter statement.  Once a Twitter statement has been issued, do not re-issue unless an extension or cancellation is required.
	Major geomagnetic storm WATCH EXTENDED: auroral zone to 6 Apr 01:00 UT <a href="http://goo.gl/UjJkmW">http://goo.gl/UjJkmW</a>	VEILLE d'orage géomagnétique majeur PROLONGÉE : zone aurorale jusqu'au 6 AVR 01:00 TU <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>	Forecast system issues a one zone storm watch, and a one zone storm watch IS already in effect.	Evaluate every 10 minutes. If the end time for the initial major storm watch has NOT been exceeded and the end time for the most recent major storm watch is different from that of the initial major storm watch, then issue Twitter statement.
	Major geomagnetic storm WATCH ENDED : auroral zone <a href="http://goo.gl/UjJkmW">http://goo.gl/UjJkmW</a>	VEILLE d'orage géomagnétique majeur TERMINÉE: zone aurorale <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>	A one zone storm watch interval has ended and no other storm watch intervals are in effect	Evaluate every 10 minutes. If the end time of the most recent major storm watch has been exceeded, then issue Twitter statement.  If a storm watch is manually cancelled, that action should also trigger the issuance of a Twitter statement.
<b>3 Zone Storm Watch</b>	Major geomagnetic storm WATCH in effect: polar cap, auroral and sub-auroral zones until 16 Apr 21:00 UT <a href="http://goo.gl/UjJkmW">http://goo.gl/UjJkmW</a>	VEILLE d'orage géomagnétique majeur: zones calotte polaire, aurorale et sub-aurorale jusqu'au 16 AVR 21:00 TU <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>	Forecast system issues a three storm watch, and a storm watch IS NOT already in effect.  A one zone storm watch becomes a three zone storm watch.	Evaluate every 10 minutes. If a storm watch has been issued, then issue Twitter statement.  Once a Twitter statement has been issued, do not re-issue unless an extension or cancellation is required.
	Major geomagnetic storm WATCH EXTENDED: polar cap, auroral and sub-auroral zones to 17 Apr 06:00 UT <a href="http://goo.gl/UjJkmW">http://goo.gl/UjJkmW</a>	VEILLE d'orage géomagnétique majeur PROLONGÉE : zones calotte polaire, aurorale et sub-aurorale jusqu'au 17 AVR 06:00 TU <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>	Forecast system issues a three zone storm watch, and a three zone storm watch IS already in effect.	Evaluate every 10 minutes. If the end time for the initial major storm watch has NOT been exceeded and the end time for the most recent major storm watch is different from that of the initial major storm watch, then issue Twitter statement.

	Major geomagnetic storm WATCH ENDED : polar cap, auroral and sub-auroral zones <a href="http://goo.gl/UljkMw">http://goo.gl/UljkMw</a>	VEILLE d'orage géomagnétique majeur TERMINÉE : zones calotte polaire, aurorale et sub-aurorales <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>	A three zone storm watch interval has ended and no other storm watch intervals are in effect	Evaluate every 10 minutes. If the end time of the most recent major storm watch has been exceeded, then issue Twitter statement.  If a storm watch is manually cancelled, that action should also trigger the issuance of a Twitter statement.
<b>Stormy and Major Storm Conditions</b>	Stormy geomagnetic activity possible: polar cap zone - next 6 hours <a href="http://goo.gl/UljkMw">http://goo.gl/UljkMw</a>	Conditions orageuses - activité géomagnétique possible : zone de la calotte polaire - 6 prochaines heures <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>	The 6-hour forecast indicates stormy or major storm conditions in any zone AND current conditions are not stormy or major storm.	Evaluate for stormy / major storm conditions every 10 minutes. Once a Twitter statement has been generated, do not re-issue until the 6-hour window has elapsed, unless conditions are upgraded from stormy to major storm.  Each zone is evaluated independently and messages are sent for each zone.  Cancellation messages are not necessary.
	Stormy geomagnetic activity possible: auroral zone - next 6 hours <a href="http://goo.gl/UljkMw">http://goo.gl/UljkMw</a>	Conditions orageuses - activité géomagnétique possible : zone aurorale - 6 prochaines heures <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>	Stormy conditions are upgraded to major storm conditions.  ***No need to issue stormy / major storm conditions notices during a major storm watch.	
	Stormy geomagnetic activity possible: sub-auroral zone - next 6 hours <a href="http://goo.gl/UljkMw">http://goo.gl/UljkMw</a>	Condition orageuses - activité géomagnétique possible : zone sub-aurorale - 6 prochaines heures <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>		
	Major storm geomagnetic activity possible: polar cap zone - next 6 hours <a href="http://goo.gl/UljkMw">http://goo.gl/UljkMw</a>	Orage majeur - activité géomagnétique possible : zone de la calotte polaire - 6 prochaines heures <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>		
	Major storm geomagnetic activity possible: auroral zone - next 6 hours <a href="http://goo.gl/UljkMw">http://goo.gl/UljkMw</a>	Orage majeur - activité géomagnétique possible : zone aurorale - 6 prochaines heures <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>		
	Major storm geomagnetic activity possible: sub-auroral zone - next 6 hours <a href="http://goo.gl/UljkMw">http://goo.gl/UljkMw</a>	Orage majeur - activité géomagnétique possible : zone sub-aurorale - 6 prochaines heures		

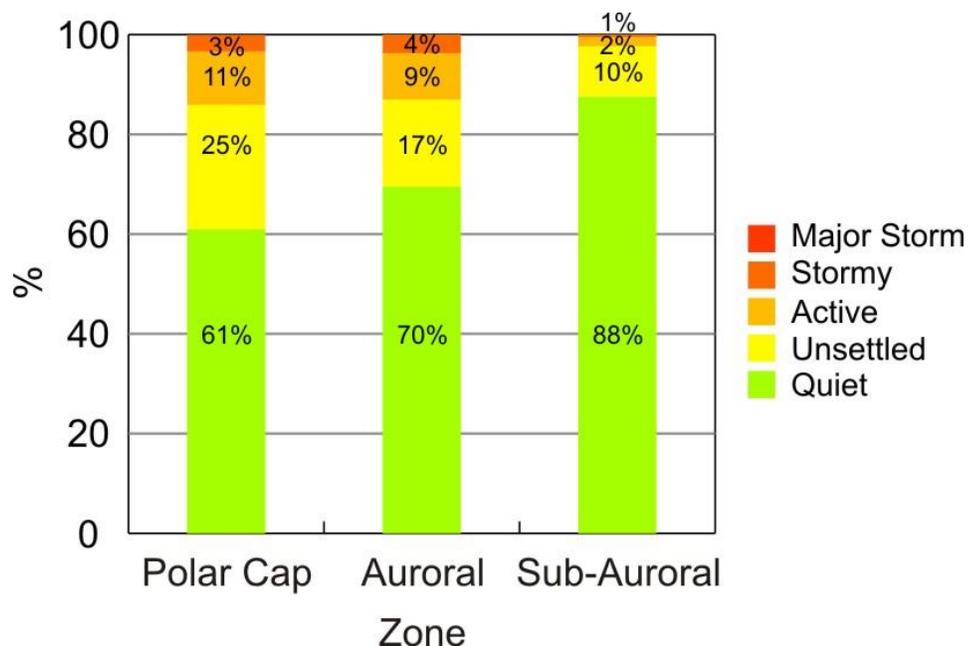
STORMY geomagnetic activity currently observed: polar cap zone <a href="http://goo.gl/UljkMw">http://goo.gl/UljkMw</a>	CONDITIONS ORAGEUSES - activité géomagnétique présentement observée : zone de la calotte polaire <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>	Current conditions indicate stormy or major storm conditions in any zone AND the same message has NOT been issued in the last 6 hours.	Evaluate current conditions every 10 minutes. Once a Twitter statement has been generated, do not re-issue until a 6-hour window has elapsed, unless conditions are upgraded from stormy to major storm.  Cancellation messages are not necessary.
STORMY geomagnetic activity currently observed: auroral zone <a href="http://goo.gl/UljkMw">http://goo.gl/UljkMw</a>	CONDITIONS ORAGEUSES - activité géomagnétique présentement observée : zone aurorale <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>	Stormy conditions are upgraded to major storm conditions AND the same message has NOT been issued in the last hour.	
STORMY geomagnetic activity currently observed: sub-auroral zone <a href="http://goo.gl/UljkMw">http://goo.gl/UljkMw</a>	CONDITIONS ORAGEUSES - activité géomagnétique présentement observée : zone sub-aurorale <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>	***No need to issue stormy / major storm conditions notices during a major storm watch.	
MAJOR STORM geomagnetic activity currently observed: the polar cap zone <a href="http://goo.gl/UljkMw">http://goo.gl/UljkMw</a>	ORAGE MAJEUR - activité géomagnétique présentement observée : zone de la calotte polaire <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>		
MAJOR STORM geomagnetic activity currently observed: auroral zone <a href="http://goo.gl/UljkMw">http://goo.gl/UljkMw</a>	ORAGE MAJEUR - activité géomagnétique présentement observée : zone aurorale <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>		
MAJOR STORM geomagnetic activity currently observed: sub-auroral zone <a href="http://goo.gl/UljkMw">http://goo.gl/UljkMw</a>	ORAGE MAJEUR - activité géomagnétique présentement observée : zone sub-aurorale <a href="http://goo.gl/HS1WRU">http://goo.gl/HS1WRU</a>		

## 6. Summary of activity

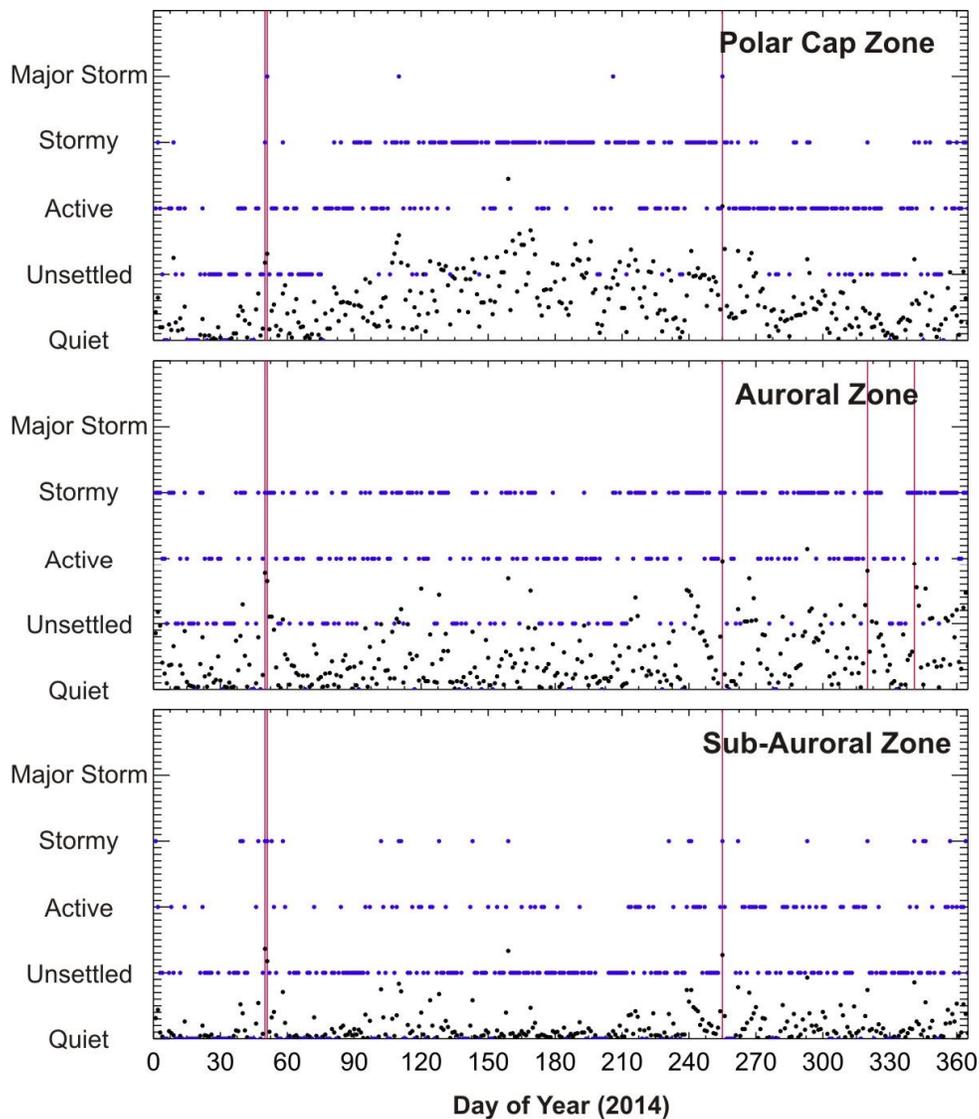
In this section we present summary of observed geomagnetic activity in 2014. Recall from Section 4 that geomagnetic activity levels have classifications of *quiet*, *unsettled*, *active*, *stormy*, and *major storm* based on the range of magnetic field variations observed during a one-hour period. Figure 1, shows the percent occurrence of *quiet*, *unsettled*, *active* and *stormy* geomagnetic activity levels in the polar cap, auroral and sub-auroral zone as reported by current conditions in 2014. Geomagnetic activity levels also reached *major storm* activity levels, but not at the 1% accuracy level reported in Figure 1. Figure 2 plots daily averaged geomagnetic activity levels for the polar cap, auroral and sub-auroral zones (black symbols) and maximum activity level for the day as reported by current conditions (blue symbols).

Figures 1 and 2 indicate geomagnetic activity levels were typically highest in the polar cap zone and lowest in the sub-auroral zone. In the polar cap zone activity was higher during the summer months, whereas activity was more uniform throughout the year for the auroral and sub-auroral zones. Major storm activity levels were observed for four days in the polar cap zone only.

Although activity seldom reached *major storm* levels within an entire zone, there were periods in 2014 where geomagnetic activity levels were high enough at individual stations to cause a *major storm watch* to be issued. A *major storm watch* is issued to indicate that *major storm* geomagnetic activity levels have been observed by multiple observatories during the same period. These conditions are likely to continue to be observed for at least the next few hours. The *major storm watch* is either limited to the auroral zone if such conditions have only been observed in that zone or applies to all of Canada if major storm conditions have been observed in both the auroral zone and sub-auroral zones.



**Figure 1: Observed geomagnetic activity for the polar cap, auroral and sub-auroral zone in 2014. The percent occurrence of quiet, unsettled, active, stormy geomagnetic activity levels are shown.**



**Figure 2: Observed geomagnetic activity for the polar cap, auroral and sub-auroral zone in 2014. The black symbols represent daily averaged geomagnetic activity while the blue symbols indicate maximum activity level for the day, as reported by current conditions. Pink bars indicate days on which a *major storm watch* was issued for the indicated zone.**

For a major storm watch to be issued, one of three criteria must be met:

1. At least two sub-auroral magnetic observatories have exceeded their respective thresholds for stormy conditions and at least three magnetic observatories of any zone have exceeded their respective thresholds for issuing a major storm watch.
2. At least three sub-auroral magnetic observatories have exceeded their respective thresholds for stormy conditions and one or more sub-auroral magnetic observatory has exceeded its respective threshold for issuing a major storm watch.
3. Only auroral magnetic observatories have exceeded their respective thresholds for stormy conditions and at least three auroral magnetic observatories have exceeded their respective thresholds for issuing a major storm watch.

If criteria in 1 or 2 are met, then a major storm watch is issued in the polar cap, auroral, and subauroral zones. If criteria 3 is met, then a major storm watch is issued in the auroral zone only. A one-zone major storm watch is not issued for the sub-auroral or polar cap zone. NOTE: It is possible for activity to rate a classification of major storm at one or more observatory, or even within an entire zone, without triggering a major storm watch. Table 10 and pink bars in Figure 2 indicate *major storm watches* that were issued in 2015.

**Table 10:** Major storm watches issued in 2015.

Start	End	Type
2014-02-19 09:32 UT	2014-02-19 11:37 UT	3 zone
2014-02-20 12:07 UT	2014-02-20 14:13 UT	3 zone
2014-09-12 16:02 UT	2014-09-12 18:17 UT	3 zone
2014-11-16 06:37 UT	2014-11-16 08:48 UT	1 zone
2014-12-07 15:32 UT	2014-12-07 18:07 UT	1 zone

## 7. Daily Bulletins

This section provides a chronological listing of the daily space weather bulletin issued in 2014. Alterations made to the original bulletins include (1) removing the list of email recipients, (2) altering the font to be consistent with this document, (3) removing the email signature to limit the length of the document. To limit the length of the document, only the English version of the bulletin has been included.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** January-01-14 4:50 PM

**Subject:** Space Weather Bulletin - 2014-01-01 issued at 21:45 UT (16:45 EST) / Bulletin de météorologie spatiale - 2014-01-01 diffusé à 21:45 TU (16:45 HNE)

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### Space Weather Bulletin - 2014-01-01 issued at 21:45 UT (16:45 EST)

#### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### Current Conditions (21:30 UT)

##### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

##### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

##### Possible Impacts on Technology:

Impacts are not expected.

#### 24 Hour Forecast

##### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

##### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

##### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

#### Detailed Information

##### Solar

Two medium solar x-ray flares have erupted over the past 24 hours.

One medium coronal hole is located near the centre of the solar disk.

##### Interplanetary

The solar wind speed is currently moderate (500-700 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** January-02-14 5:26 PM

**Subject:** Space Weather Bulletin - 2014-01-02 issued at 22:18 UT (17:18 EST) / Bulletin de météorologie spatiale - 2014-01-02 diffusé à 22:18 TU (17:18 HNE)

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#### **Space Weather Bulletin - 2014-01-02 issued at 22:18 UT (17:18 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (21:45 UT)**

###### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: unsettled

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

##### **Detailed Information**

###### **Solar**

Solar activity has been low.

An M (medium) solar x-ray flare erupted 02 JAN 2014 02:24 UT near the edge of the solar disk.

## Interplanetary

The solar wind speed is currently moderate (500-700 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

## Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** January-03-14 2:02 PM

**Subject:** Space Weather Bulletin - 2014-01-03 issued at 18:59 UT (13:59 EST) / Bulletin de météorologie spatiale - 2014-01-03 diffusé à 18:59 TU (13:59 HNE)

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## Space Weather Bulletin - 2014-01-03 issued at 18:59 UT (13:59 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:45 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: active

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

### Detailed Information

## Solar

Solar activity has been low.

An M (medium) solar x-ray flare erupted 03 JAN 2014 12:41 UT near the edge of the solar disk.

## Interplanetary

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

## Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** January-04-14 4:54 PM

**Subject:** Space Weather Bulletin - 2014-01-04 issued at 21:52 UT (16:52 EST) / Bulletin de météorologie spatiale - 2014-01-04 diffusé à 21:52 TU (16:52 HNE)

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## Space Weather Bulletin - 2014-01-04 issued at 21:52 UT (16:52 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (21:15 UT)

#### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been low.

An M (medium) solar x-ray flare erupted 03 JAN 2014 21:09 UT near the edge of the solar disk.

### Interplanetary

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|Bz| < 5$  nT) levels.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** January-05-14 2:43 PM

**Subject:** Space Weather Bulletin - 2014-01-05 issued at 19:42 UT (14:42 EST) / Bulletin de météorologie spatiale - 2014-01-05 diffusé à 19:42 TU (14:42 HNE)

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## Space Weather Bulletin - 2014-01-05 issued at 19:42 UT (14:42 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (19:15 UT)

#### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.

Two medium solar x-ray flares have erupted over the past 24 hours.

A CME erupted on 04 JAN 2014 19:22 UT. It is not yet known if the CME will impact the Earth.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|Bz| < 2$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** January-06-14 3:18 PM

**Subject:** Space Weather Bulletin - 2014-01-06 issued at 20:13 UT (15:13 EST) / Bulletin de météorologie spatiale - 2014-01-06 diffusé à 20:13 TU (15:13 HNE)

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### **Space Weather Bulletin - 2014-01-06 issued at 20:13 UT (15:13 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (20:00 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with active intervals

sub-auroral zone: quiet with active intervals

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap, auroral, and sub-auroral zones.

Directional Drilling: Potential for deviations in the polar cap, auroral, and sub-auroral zones.

**Detailed Information**

**Solar**

A non-Earth-directed CME erupted on 06 JAN 2014 ~08:00 UT.

A CME was observed on 04 JAN 2014 19:22 UT, and is expected to deliver a glancing blow to the Earth on 07-08 JAN 2014.

**Interplanetary**

A solar energetic proton event started on 06 JAN 2014 08:35 UT. Current levels are moderate.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|Bz| < 2$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** January-07-14 2:40 PM

**Subject:** Space Weather Bulletin - 2014-01-07 issued at 19:37 UT (14:37 EST) / Bulletin de météorologie spatiale - 2014-01-07 diffusé à 19:37 TU (14:37 HNE)

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**Space Weather Bulletin - 2014-01-07 issued at 19:37 UT (14:37 EST)**

**Summary**

There is currently no major storm watch in effect.

Two medium to large solar x-ray flares have erupted over the past 24 hours.

CMEs may be associated with these flares.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

## 24 Hour Forecast

### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals  
auroral zone: unsettled  
sub-auroral zone: quiet with unsettled intervals

### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

An X (large) solar x-ray flare erupted 07 JAN 2014 18:30 UT near the centre of the solar disk.  
An M (medium) solar x-ray flare erupted 07 JAN 2014 10:13 UT near the centre of the solar disk.

#### Interplanetary

The solar wind speed is currently very slow (< 400 km/s).  
The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.  
An interplanetary shock has been observed on 07 JAN 2014 14:20 UT.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.  
Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** January-07-14 10:50 PM

**Subject:** Update: Space Weather Bulletin - 2014-01-08 issued at 03:21 UT (22:21 EST) / Mise à jour : Bulletin de météorologie spatiale - 2014-01-08 diffusé à 03:21 TU (22:21 HNE)

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### Update: Space Weather Bulletin - 2014-01-08 issued at 03:21 UT (22:21 EST)

#### Summary

A polar cap absorption event is possible.  
A fast Earth-directed CME has erupted over the past 24 hours.  
A large solar x-ray flare has erupted over the past 24 hours.  
A medium solar x-ray flare has erupted over the past 24 hours.  
See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### Detailed Information

##### Solar

A fast Earth-directed CME erupted on 07 JAN 2014 18:24 UT and is expected to reach the Earth on [\[Not available at the moment\]](#).

An X (large) solar x-ray flare erupted 07 JAN 2014 18:04 UT near the centre of the solar disk.

An M (medium) solar x-ray flare erupted 07 JAN 2014 10:07 UT near the centre of the solar disk.

### **Interplanetary**

A solar energetic proton event started on 07 JAN 2014 ~19:30 UT. Current levels are high.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** January-08-14 3:48 PM

**Subject:** Space Weather Bulletin - 2014-01-08 issued at 20:43 UT (15:43 EST) / Bulletin de météorologie spatiale - 2014-01-08 diffusé à 20:43 TU (15:43 HNE)

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### **Space Weather Bulletin - 2014-01-08 issued at 20:43 UT (15:43 EST)**

#### **Summary**

There is currently no major storm watch in effect.

Stormy/major storm conditions are possible in the polar cap, auroral, and sub-auroral zones within the next 24 hours.

A polar cap absorption event is currently in progress in the polar cap and auroral zones.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (20:00 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with stormy intervals

auroral zone: unsettled with stormy intervals

sub-auroral zone: quiet with stormy intervals

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

Power Systems: possibility of weak voltage fluctuations in the auroral and sub-auroral zones.

Aeromagnetic surveys: Potential for significant disruptions in the polar cap, auroral, and sub-auroral zones.

Directional Drilling: Potential for significant deviations in the polar cap, auroral, and sub-auroral zones.

#### **Detailed Information**

##### **Solar**

A fast Earth-directed CME erupted on 07 JAN 2014 18:24 UT and is expected to reach the Earth on 09 JAN 2014 ~08:00 UT, resulting in disturbed geomagnetic activity.

An M (medium) solar x-ray flare erupted 08 JAN 2014 03:40 UT near the edge of the solar disk.  
One small coronal hole is located near the centre of the solar disk.

#### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.  
A solar energetic proton event started on 07 JAN 2014 ~19:30 UT. Current levels are high.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** January-09-14 3:43 PM

**Subject:** Space Weather Bulletin - 2014-01-09 issued at 20:41 UT (15:41 EST) / Bulletin de météorologie spatiale - 2014-01-09 diffusé à 20:41 TU (15:41 HNE)

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#### **Space Weather Bulletin - 2014-01-09 issued at 20:41 UT (15:41 EST)**

##### **Summary**

There is currently no major storm watch in effect.  
Stormy conditions are possible in the polar cap, auroral, and sub-auroral zones within the next 24 hours.  
A polar cap absorption event is possible.  
See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (20:15 UT)**

###### **Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: quiet  
sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

###### **Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.  
HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals  
auroral zone: unsettled with stormy intervals

sub-auroral zone: quiet with stormy intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Power Systems: possibility of weak voltage fluctuations in the auroral and sub-auroral zones.

Aeromagnetic surveys: Potential for significant disruptions in the polar cap, auroral, and sub-auroral zones.

Directional Drilling: Potential for significant deviations in the polar cap, auroral, and sub-auroral zones.

HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

**Detailed Information**

**Solar**

One small coronal hole is located near the centre of the solar disk.

A fast Earth-directed CME erupted on 07 JAN 2014 18:24 UT and is expected to reach the Earth on 09 JAN 2014, resulting in disturbed geomagnetic activity.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** January-10-14 4:17 PM

**Subject:** Space Weather Bulletin - 2014-01-10 issued at 20:55 UT (15:55 EST) / Bulletin de météorologie spatiale - 2014-01-10 diffusé à 20:55 TU (15:55 HNE)

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**Space Weather Bulletin - 2014-01-10 issued at 20:55 UT (15:55 EST)**

**Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions due to solar activity observed on 07 JAN 2014 are not expected.

The polar cap absorption event reported on 08 JAN 2014 has ended.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:30 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: quiet with active intervals

sub-auroral zone: quiet with active intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap, auroral, and sub-auroral zones.

Directional Drilling: Potential for deviations in the polar cap, auroral, and sub-auroral zones.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** January-11-14 2:39 PM

**Subject:** Space Weather Bulletin - 2014-01-11 issued at 19:35 UT (14:35 EST) / Bulletin de météorologie spatiale - 2014-01-11 diffusé à 19:35 TU (14:35 HNE)

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**Space Weather Bulletin - 2014-01-11 issued at 19:35 UT (14:35 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.  
One small coronal hole is located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).  
The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** January-12-14 5:09 PM

**Subject:** Space Weather Bulletin - 2014-01-12 issued at 22:04 UT (17:04 EST) / Bulletin de météorologie spatiale - 2014-01-12 diffusé à 22:04 TU (17:04 HNE)

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**Space Weather Bulletin - 2014-01-12 issued at 22:04 UT (17:04 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: unsettled  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).

Moderate solar wind speeds are due to high speed streams from coronal holes.

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** January-13-14 3:06 PM

**Subject:** Space Weather Bulletin - 2014-01-13 issued at 20:04 UT (15:04 EST) / Bulletin de météorologie spatiale - 2014-01-13 diffusé à 20:04 TU (15:04 HNE)

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**Space Weather Bulletin - 2014-01-13 issued at 20:04 UT (15:04 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

## **Current Conditions (19:45 UT)**

### **Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

### **Possible Impacts on Technology:**

Impacts are not expected.

## **24 Hour Forecast**

### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

### **Possible Impacts on Technology:**

Impacts are not expected.

## **Detailed Information**

### **Solar**

Solar activity has been low.

### **Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).  
Moderate solar wind speeds are due to high speed streams from coronal holes.  
The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** January-14-14 3:40 PM

**Subject:** Space Weather Bulletin - 2014-01-14 issued at 20:36 UT (15:36 EST) / Bulletin de météorologie spatiale - 2014-01-14 diffusé à 20:36 TU (15:36 HNE)

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## **Space Weather Bulletin - 2014-01-14 issued at 20:36 UT (15:36 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** January-15-14 4:11 PM

**Subject:** FW: Space Weather Bulletin - 2014-01-15 issued at 21:08 UT (16:08 EST) / Bulletin de météorologie spatiale - 2014-01-15 diffusé à 21:08 TU (16:08 HNE)

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**Space Weather Bulletin - 2014-01-15 issued at 21:08 UT (16:08 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:00 UT)****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** January-16-14 4:18 PM

**Subject:** Space Weather Bulletin - 2014-01-16 issued at 21:16 UT (16:16 EST) / Bulletin de météorologie spatiale - 2014-01-16 diffusé à 21:16 TU (16:16 HNE)

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**Space Weather Bulletin - 2014-01-16 issued at 21:16 UT (16:16 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:00 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** January-17-14 3:14 PM

**Subject:** Space Weather Bulletin - 2014-01-17 issued at 20:11 UT (15:11 EST) / Bulletin de météorologie spatiale - 2014-01-17 diffusé à 20:11 TU (15:11 HNE)

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**Space Weather Bulletin - 2014-01-17 issued at 20:11 UT (15:11 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:00 UT)****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** January-18-14 3:26 PM

**Subject:** Space Weather Bulletin - 2014-01-18 issued at 20:24 UT (15:24 EST) / Bulletin de météorologie spatiale - 2014-01-18 diffusé à 20:24 TU (15:24 HNE)

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**Space Weather Bulletin - 2014-01-18 issued at 20:24 UT (15:24 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been very low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** January-19-14 4:36 PM

**Subject:** Space Weather Bulletin - 2014-01-19 issued at 21:34 UT (16:34 EST) / Bulletin de météorologie spatiale - 2014-01-19 diffusé à 21:34 TU (16:34 HNE)

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**Space Weather Bulletin - 2014-01-19 issued at 21:34 UT (16:34 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been very low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** January-20-14 4:15 PM

**Subject:** Space Weather Bulletin - 2014-01-20 issued at 21:14 UT (16:14 EST) / Bulletin de météorologie spatiale - 2014-01-20 diffusé à 21:14 TU (16:14 HNE)

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**Space Weather Bulletin - 2014-01-20 issued at 21:14 UT (16:14 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:00 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been very low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** January-21-14 3:47 PM

**Subject:** Space Weather Bulletin - 2014-01-21 issued at 20:45 UT (15:45 EST) / Bulletin de météorologie spatiale - 2014-01-21 diffusé à 20:45 TU (15:45 HNE)

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**Space Weather Bulletin - 2014-01-21 issued at 20:45 UT (15:45 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been very low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** January-22-14 3:53 PM

**Subject:** Space Weather Bulletin - 2014-01-22 issued at 20:52 UT (15:52 EST) / Bulletin de météorologie spatiale - 2014-01-22 diffusé à 20:52 TU (15:52 HNE)

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**Space Weather Bulletin - 2014-01-22 issued at 20:52 UT (15:52 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:45 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with active intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been moderate.

**Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** January-23-14 3:39 PM

**Subject:** Space Weather Bulletin - 2014-01-23 issued at 20:37 UT (15:37 EST) / Bulletin de météorologie spatiale - 2014-01-23 diffusé à 20:37 TU (15:37 HNE)

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**Space Weather Bulletin - 2014-01-23 issued at 20:37 UT (15:37 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:30 UT)****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with active intervals

sub-auroral zone: quiet with active intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been very low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** January-24-14 3:37 PM

**Subject:** Space Weather Bulletin - 2014-01-24 issued at 20:34 UT (15:34 EST) / Bulletin de météorologie spatiale - 2014-01-24 diffusé à 20:34 TU (15:34 HNE)

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**Space Weather Bulletin - 2014-01-24 issued at 20:34 UT (15:34 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been very low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** January-25-14 3:55 PM

**Subject:** Space Weather Bulletin - 2014-01-25 issued at 20:53 UT (15:53 EST) / Bulletin de météorologie spatiale - 2014-01-25 diffusé à 20:53 TU (15:53 HNE)

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**Space Weather Bulletin - 2014-01-25 issued at 20:53 UT (15:53 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:30 UT)****Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: unsettled

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: unavailable

**Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

##### **Detailed Information**

###### **Solar**

Solar activity has been very low.

###### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** January-26-14 4:15 PM

**Subject:** Space Weather Bulletin - 2014-01-26 issued at 21:12 UT (16:12 EST) / Bulletin de météorologie spatiale - 2014-01-26 diffusé à 21:12 TU (16:12 HNE)

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#### **Space Weather Bulletin - 2014-01-26 issued at 21:12 UT (16:12 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (21:00 UT)**

###### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: unavailable

###### **Possible Impacts on Technology:**

Impacts are not expected.

## 24 Hour Forecast

### Geomagnetic Activity:

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

### Possible Impacts on Technology:

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been very low.

### Interplanetary

The solar wind speed is currently very slow (< 400 km/s).

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit for 25 JAN 2014 is unavailable but is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** January-27-14 3:08 PM

**Subject:** Space Weather Bulletin - 2014-01-27 issued at 20:04 UT (15:04 EST) / Bulletin de météorologie spatiale - 2014-01-27 diffusé à 20:04 TU (15:04 HNE)

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## Space Weather Bulletin - 2014-01-27 issued at 20:04 UT (15:04 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (19:45 UT)

#### Geomagnetic Activity:

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

## 24 Hour Forecast

**Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been very low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit for 26 JAN 2014 is unavailable but is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** January-28-14 4:00 PM

**Subject:** Space Weather Bulletin - 2014-01-28 issued at 20:58 UT (15:58 EST) / Bulletin de météorologie spatiale - 2014-01-28 diffusé à 20:58 TU (15:58 HNE)

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**Space Weather Bulletin - 2014-01-28 issued at 20:58 UT (15:58 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:45 UT)****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been moderate.

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

The solar wind speed is currently very slow ( $< 400$  km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** January-29-14 2:38 PM

**Subject:** Space Weather Bulletin - 2014-01-29 issued at 19:37 UT (14:37 EST) / Bulletin de météorologie spatiale - 2014-01-29 diffusé à 19:37 TU (14:37 HNE)

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**Space Weather Bulletin - 2014-01-29 issued at 19:37 UT (14:37 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been moderate.  
Several medium solar x-ray flares have erupted over the past 24 hours.

**Interplanetary**

Interplanetary activity has been moderate.  
The solar wind speed is currently slow (400-500 km/s).  
The interplanetary magnetic field has been fluctuating at moderate ( $|Bz| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.  
Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** January-30-14 3:02 PM

**Subject:** Space Weather Bulletin - 2014-01-30 issued at 20:01 UT (15:01 EST) / Bulletin de météorologie spatiale - 2014-01-30 diffusé à 20:01 TU (15:01 HNE)

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**Space Weather Bulletin - 2014-01-30 issued at 20:01 UT (15:01 EST)****Summary**

There is currently no major storm watch in effect.  
See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:45 UT)****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with active intervals

sub-auroral zone: quiet with active intervals

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been moderate.

Two non-Earth-directed CMEs erupted on 30 Jan 2014 at 1:30 and 16:00 UT.

##### **Interplanetary**

Interplanetary activity has been moderate.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** January-31-14 3:00 PM

**Subject:** Space Weather Bulletin - 2014-01-31 issued at 19:59 UT (14:59 EST) / Bulletin de météorologie spatiale - 2014-01-31 diffusé à 19:59 TU (14:59 HNE)

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#### **Space Weather Bulletin - 2014-01-31 issued at 19:59 UT (14:59 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (19:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with active intervals

sub-auroral zone: quiet with active intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been moderate.

A non-Earth-directed CME erupted on 30 Jan 2014 16:00 UT.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** February-01-14 4:32 PM

**Subject:** Space Weather Bulletin - 2014-02-01 issued at 21:31 UT (16:31 EST) / Bulletin de météorologie spatiale - 2014-02-01 diffusé à 21:31 TU (16:31 HNE)

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**Space Weather Bulletin - 2014-02-01 issued at 21:31 UT (16:31 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

A non-Earth-directed CME erupted on 30 Jan 2014 16:00 UT.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** February-02-14 5:42 PM

**Subject:** Space Weather Bulletin - 2014-02-02 issued at 22:40 UT (17:40 EST) / Bulletin de météorologie spatiale - 2014-02-02 diffusé à 22:40 TU (17:40 HNE)

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**Space Weather Bulletin - 2014-02-02 issued at 22:40 UT (17:40 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (22:30 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been moderate.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** February-03-14 3:24 PM

**Subject:** Space Weather Bulletin - 2014-02-03 issued at 20:23 UT (15:23 EST) / Bulletin de météorologie spatiale - 2014-02-03 diffusé à 20:23 TU (15:23 HNE)

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**Space Weather Bulletin - 2014-02-03 issued at 20:23 UT (15:23 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:15 UT)****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been moderate.

**Interplanetary**

Interplanetary activity has been low.  
The solar wind speed is currently very slow (< 400 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.  
Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** February-04-14 3:33 PM

**Subject:** Space Weather Bulletin - 2014-02-04 issued at 20:32 UT (15:32 EST) / Bulletin de météorologie spatiale - 2014-02-04 diffusé à 20:32 TU (15:32 HNE)

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**Space Weather Bulletin - 2014-02-04 issued at 20:32 UT (15:32 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (20:15 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.

#### **Interplanetary**

Interplanetary activity has been moderate.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** February-05-14 2:24 PM

**Subject:** Space Weather Bulletin - 2014-02-05 issued at 19:22 UT (14:22 EST) / Bulletin de météorologie spatiale - 2014-02-05 diffusé à 19:22 TU (14:22 HNE)

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**Space Weather Bulletin - 2014-02-05 issued at 19:22 UT (14:22 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (19:15 UT)**

#### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.

#### **Interplanetary**

Interplanetary activity has been moderate.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** February-06-14 1:41 PM

**Subject:** Space Weather Bulletin - 2014-02-06 issued at 18:40 UT (13:40 EST) / Bulletin de météorologie spatiale - 2014-02-06 diffusé à 18:40 TU (13:40 HNE)

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**Space Weather Bulletin - 2014-02-06 issued at 18:40 UT (13:40 EST)**

## Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

## Current Conditions (18:30 UT)

### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

### Possible Impacts on Technology:

Impacts are not expected.

## 24 Hour Forecast

### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

### Possible Impacts on Technology:

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been moderate.

### Interplanetary

Interplanetary activity has been moderate.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** February-07-14 4:01 PM

**Subject:** Space Weather Bulletin - 2014-02-07 issued at 21:00 UT (16:00 EST) / Bulletin de météorologie spatiale - 2014-02-07 diffusé à 21:00 TU (16:00 HNE)

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## Space Weather Bulletin - 2014-02-07 issued at 21:00 UT (16:00 EST)

### Summary

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 08 Feb 2014 to 10 Feb 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (20:45 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: unsettled

sub-auroral zone: unsettled

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

### Detailed Information

#### Solar

Solar activity has been moderate.

#### Interplanetary

Interplanetary activity has been high.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at high ( $|B_z| < 20$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** February-08-14 5:00 PM

**Subject:** Space Weather Bulletin - 2014-02-08 issued at 21:59 UT (16:59 EST) / Bulletin de météorologie spatiale - 2014-02-08 diffusé à 21:59 TU (16:59 HNE)

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## **Space Weather Bulletin - 2014-02-08 issued at 21:59 UT (16:59 EST)**

### **Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 08 Feb 2014 to 10 Feb 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (21:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.

#### **Interplanetary**

Interplanetary activity has been moderate.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and unsettled with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** February-09-14 3:57 PM

**Subject:** Space Weather Bulletin - 2014-02-09 issued at 20:56 UT (15:56 EST) / Bulletin de météorologie spatiale - 2014-02-09 diffusé à 20:56 TU (15:56 HNE)

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### **Space Weather Bulletin - 2014-02-09 issued at 20:56 UT (15:56 EST)**

#### **Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 08 Feb 2014 to 10 Feb 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (20:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: unsettled

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been moderate.

##### **Interplanetary**

Interplanetary activity has been moderate.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|Bz| < 10$  nT) levels.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** February-10-14 2:03 PM

**Subject:** Space Weather Bulletin - 2014-02-10 issued at 19:02 UT (14:02 EST) / Bulletin de météorologie spatiale - 2014-02-10 diffusé à 19:02 TU (14:02 HNE)

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### **Space Weather Bulletin - 2014-02-10 issued at 19:02 UT (14:02 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (18:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: unsettled

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been moderate.

##### **Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** February-11-14 3:41 PM

**Subject:** Space Weather Bulletin - 2014-02-11 issued at 20:37 UT (15:37 EST) / Bulletin de météorologie spatiale - 2014-02-11 diffusé à 20:37 TU (15:37 HNE)

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### **Space Weather Bulletin - 2014-02-11 issued at 20:37 UT (15:37 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (20:30 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been moderate.

##### **Interplanetary**

Interplanetary activity has been low.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** February-12-14 4:09 PM

**Subject:** Space Weather Bulletin - 2014-02-12 issued at 21:05 UT (16:05 EST) / Bulletin de météorologie spatiale - 2014-02-12 diffusé à 21:05 TU (16:05 HNE)

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### **Space Weather Bulletin - 2014-02-12 issued at 21:05 UT (16:05 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (21:00 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been moderate.

Two slow Earth-directed CMEs erupted on 11 Feb 2014 at 04:12 UT and 09:24 UT and is expected to reach the Earth on 15 Feb 2014, resulting in increased geomagnetic activity.

A slow Earth-directed CME erupted on 12 Feb 2014 05:36 UT and is expected to reach the Earth on 16 Feb 2014, resulting in increased geomagnetic activity.

## Interplanetary

Interplanetary activity has been low.

## Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** February-13-14 3:53 PM

**Subject:** Space Weather Bulletin - 2014-02-13 issued at 20:50 UT (15:50 EST) / Bulletin de météorologie spatiale - 2014-02-13 diffusé à 20:50 TU (15:50 HNE)

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## Space Weather Bulletin - 2014-02-13 issued at 20:50 UT (15:50 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (20:45 UT)

#### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: moderate

#### Possible Impacts on Technology:

Geostationary satellites: moderate risk of internal charging.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been moderate.

Two slow Earth-directed CMEs erupted on 11 Feb 2014 at 04:12 UT and 09:24 UT and is expected to reach the Earth on 15 Feb 2014, resulting in increased geomagnetic activity.

A slow Earth-directed CME erupted on 12 Feb 2014 05:36 UT and is expected to reach the Earth on 16 Feb 2014, resulting in increased geomagnetic activity.

### **Interplanetary**

Interplanetary activity has been low.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** February-14-14 3:23 PM

**Subject:** Space Weather Bulletin - 2014-02-14 issued at 20:15 UT (15:15 EST) / Bulletin de météorologie spatiale - 2014-02-14 diffusé à 20:15 TU (15:15 HNE)

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### **Space Weather Bulletin - 2014-02-14 issued at 20:15 UT (15:15 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (20:00 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

##### **Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with active intervals

sub-auroral zone: quiet with active intervals

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been moderate.

Two slow Earth-directed CMEs erupted on 11 Feb 2014 at 04:12 UT and 09:24 UT and is expected to reach the Earth on 15 Feb 2014, resulting in increased geomagnetic activity.

A slow Earth-directed CME erupted on 12 Feb 2014 05:36 UT and is expected to reach the Earth on 16 Feb 2014, resulting in increased geomagnetic activity.

### Interplanetary

Interplanetary activity has been low.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** February-15-14 5:09 PM

**Subject:** Space Weather Bulletin - 2014-02-15 issued at 22:07 UT (17:07 EST) / Bulletin de météorologie spatiale - 2014-02-15 diffusé à 22:07 TU (17:07 HNE)

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## Space Weather Bulletin - 2014-02-15 issued at 22:07 UT (17:07 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (21:45 UT)

#### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: quiet with active intervals

sub-auroral zone: quiet with active intervals

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

A slow Earth-directed CME erupted on 12 Feb 2014 05:36 UT and is expected to reach the Earth on 16 Feb 2014, resulting in increased geomagnetic activity.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** February-16-14 4:04 PM

**Subject:** Space Weather Bulletin - 2014-02-16 issued at 21:01 UT (16:01 EST) / Bulletin de météorologie spatiale - 2014-02-16 diffusé à 21:01 TU (16:01 HNE)

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**Space Weather Bulletin - 2014-02-16 issued at 21:01 UT (16:01 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:45 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

One coronal hole is located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** February-17-14 3:01 PM

**Subject:** Space Weather Bulletin - 2014-02-17 issued at 19:58 UT (14:58 EST) / Bulletin de météorologie spatiale - 2014-02-17 diffusé à 19:58 TU (14:58 HNE)

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**Space Weather Bulletin - 2014-02-17 issued at 19:58 UT (14:58 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:30 UT)****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

One coronal hole is located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** February-18-14 2:05 PM

**Subject:** Space Weather Bulletin - 2014-02-18 issued at 19:01 UT (14:01 EST) / Bulletin de météorologie spatiale - 2014-02-18 diffusé à 19:01 TU (14:01 HNE)

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**Space Weather Bulletin - 2014-02-18 issued at 19:01 UT (14:01 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:45 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

One coronal hole is located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** February-19-14 3:34 PM

**Subject:** Space Weather Bulletin - 2014-02-19 issued at 20:28 UT (15:28 EST) / Bulletin de météorologie spatiale - 2014-02-19 diffusé à 20:28 TU (15:28 HNE)

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**Space Weather Bulletin - 2014-02-19 issued at 20:28 UT (15:28 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:15 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: active with stormy intervals

sub-auroral zone: active

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral and sub-auroral zones.

Directional Drilling: Potential for deviations in the auroral and sub-auroral zones.

**Detailed Information**

**Solar**

Solar activity has been low.

One coronal hole is located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been moderate.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and unsettled with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, active with stormy intervals in the auroral zone, and active in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** February-20-14 3:12 PM

**Subject:** Space Weather Bulletin - 2014-02-20 issued at 20:08 UT (15:08 EST) / Bulletin de météorologie spatiale - 2014-02-20 diffusé à 20:08 TU (15:08 HNE)

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**Space Weather Bulletin - 2014-02-20 issued at 20:08 UT (15:08 EST)**

**Summary**

There is currently no major storm watch in effect.

The polar cap absorption event that began 20 Feb 2014 08:55 UT in the polar cap zone ended 20 Feb 2014 11:10 UT.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:00 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: active with stormy intervals  
auroral zone: active with stormy intervals  
sub-auroral zone: unsettled with active intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.  
Directional Drilling: Potential for deviations in the polar cap and auroral zones.  
Geostationary satellites: moderate risk of internal charging.

**Detailed Information****Solar**

Solar activity has been moderate.  
One coronal hole is located near the edge of the solar disk.  
Two CMEs were observed on 19 Feb 2014, and are expected to deliver a glancing blow to the Earth on 22 Feb 2014, resulting in increased geomagnetic activity.

**Interplanetary**

Interplanetary activity has been moderate.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with major storm intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and unsettled with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and unsettled with active intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** February-21-14 2:52 PM

**Subject:** Space Weather Bulletin - 2014-02-21 issued at 19:45 UT (14:45 EST) / Bulletin de météorologie spatiale - 2014-02-21 diffusé à 19:45 TU (14:45 HNE)

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**Space Weather Bulletin - 2014-02-21 issued at 19:45 UT (14:45 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:30 UT)****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: high

**Possible Impacts on Technology:**

Geostationary satellites: high risk of internal charging.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a high level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** February-22-14 3:00 PM

**Subject:** Space Weather Bulletin - 2014-02-22 issued at 19:56 UT (14:56 EST) / Bulletin de météorologie spatiale - 2014-02-22 diffusé à 19:56 TU (14:56 HNE)

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**Space Weather Bulletin - 2014-02-22 issued at 19:56 UT (14:56 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:45 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** February-23-14 4:11 PM

**Subject:** Space Weather Bulletin - 2014-02-23 issued at 21:08 UT (16:08 EST) / Bulletin de météorologie spatiale - 2014-02-23 diffusé à 21:08 TU (16:08 HNE)

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**Space Weather Bulletin - 2014-02-23 issued at 21:08 UT (16:08 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:00 UT)****Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: active

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been moderate.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** February-24-14 2:52 PM

**Subject:** Space Weather Bulletin - 2014-02-24 issued at 19:50 UT (14:50 EST) / Bulletin de météorologie spatiale - 2014-02-24 diffusé à 19:50 TU (14:50 HNE)

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**Space Weather Bulletin - 2014-02-24 issued at 19:50 UT (14:50 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:45 UT)****Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

One coronal hole is located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** February-25-14 3:12 PM

**Subject:** Space Weather Bulletin - 2014-02-25 issued at 20:10 UT (15:10 EST) / Bulletin de météorologie spatiale - 2014-02-25 diffusé à 20:10 TU (15:10 HNE)

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**Space Weather Bulletin - 2014-02-25 issued at 20:10 UT (15:10 EST)**

**Summary**

There is currently no major storm watch in effect.

A large solar x-ray flare has erupted over the past 24 hours.

An ionospheric absorption event is possible.

A moderate CME was observed on 25 Feb 2014, and is expected to deliver a glancing blow to the Earth on 28 Feb 2014.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:45 UT)****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been high.

The active region located near the east limb of the solar disk has produced a solar x-ray flare and an associated CME and has the potential to produce subsequent solar eruptions.

One medium coronal hole is located near the centre of the solar disk.

**Interplanetary**

A solar energetic proton event started on 25 Feb 2014 13:00 UT. Current levels are moderate.

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** February-26-14 5:52 PM

**Subject:** Space Weather Bulletin - 2014-02-26 issued at 22:50 UT (17:50 EST) / Bulletin de météorologie spatiale - 2014-02-26 diffusé à 22:50 TU (17:50 HNE)

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**Space Weather Bulletin - 2014-02-26 issued at 22:50 UT (17:50 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (22:30 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

One medium coronal hole is located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** February-27-14 2:22 PM

**Subject:** Space Weather Bulletin - 2014-02-27 issued at 19:19 UT (14:19 EST) / Bulletin de météorologie spatiale - 2014-02-27 diffusé à 19:19 TU (14:19 HNE)

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## Space Weather Bulletin - 2014-02-27 issued at 19:19 UT (14:19 EST)

### Summary

There is currently no major storm watch in effect.

An Earth-directed CME erupted on 25 Feb 2014 12:00 UT and is expected to reach the Earth on 27 Feb 2014, resulting in increased geomagnetic activity.

An ionospheric absorption event is possible.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:45 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: active

sub-auroral zone: unsettled

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: unsettled with active intervals

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap, auroral, and sub-auroral zones.

Directional Drilling: Potential for deviations in the polar cap, auroral, and sub-auroral zones.

### Detailed Information

#### Solar

Solar activity has been low.

#### Interplanetary

The solar wind speed has been at 500 km/s since the passage of an interplanetary shock 27 Feb 2014 16:00 UT.

The interplanetary magnetic field has been fluctuating at high ( $|B_z| < 20$  nT) levels.

A solar energetic proton event started on 27 Feb 2014 16:00 UT. Current levels are moderate.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and unsettled with active intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** February-28-14 4:09 PM

**Subject:** Space Weather Bulletin - 2014-02-28 issued at 21:06 UT (16:06 EST) / Bulletin de météorologie spatiale - 2014-02-28 diffusé à 21:06 TU (16:06 HNE)

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## **Space Weather Bulletin - 2014-02-28 issued at 21:06 UT (16:06 EST)**

### **Summary**

There is currently no major storm watch in effect.

An ionospheric absorption event is possible.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (20:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

A solar energetic proton event started on 25 Feb 2014 13:00 UT. Current levels are moderate.

Interplanetary activity has been moderate.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** March-01-14 6:49 PM

**Subject:** Space Weather Bulletin - 2014-03-01 issued at 23:47 UT (18:47 EST) / Bulletin de météorologie spatiale - 2014-03-01 diffusé à 23:47 TU (18:47 HNE)

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### **Space Weather Bulletin - 2014-03-01 issued at 23:47 UT (18:47 EST)**

#### **Summary**

There is currently no major storm watch in effect.

A polar cap absorption event is possible.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (23:30 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

Two medium coronal holes are located near the edge of the solar disk.

##### **Interplanetary**

A solar energetic proton event started on 28 Feb 2014 08:35 UT. Current levels are moderate.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** March-02-14 2:59 PM

**Subject:** Space Weather Bulletin - 2014-03-02 issued at 19:57 UT (14:57 EST) / Bulletin de météorologie spatiale - 2014-03-02 diffusé à 19:57 TU (14:57 HNE)

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### **Space Weather Bulletin - 2014-03-02 issued at 19:57 UT (14:57 EST)**

#### **Summary**

There is currently no major storm watch in effect.

A polar cap absorption event is possible.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (19:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

#### **Detailed Information**

##### **Solar**

One medium coronal hole is located near the edge of the solar disk.

Solar activity has been low.

### **Interplanetary**

A solar energetic proton event started on 25 Feb 2014 08:15 UT. Current levels are moderate.

Interplanetary activity has been low.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** March-03-14 2:33 PM

**Subject:** Space Weather Bulletin - 2014-03-03 issued at 19:31 UT (14:31 EST) / Bulletin de météorologie spatiale - 2014-03-03 diffusé à 19:31 TU (14:31 HNE)

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### **Space Weather Bulletin - 2014-03-03 issued at 19:31 UT (14:31 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (19:15 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

Two medium coronal holes are located near the edge of the solar disk.

#### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [<mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca>]

**Sent:** March 4, 2014 13:44

**Subject:** Space Weather Bulletin - 2014-03-04 issued at 18:42 UT (13:42 EST) / Bulletin de météorologie spatiale - 2014-03-04 diffusé à 18:42 TU (13:42 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-03-04 issued at 18:42 UT (13:42 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (18:30 UT)**

###### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been low.

Two medium coronal holes are located near the centre of the solar disk.

### Interplanetary

Interplanetary activity has been low.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** March-05-14 1:08 PM

**Subject:** Space Weather Bulletin - 2014-03-05 issued at 18:07 UT (13:07 EST) / Bulletin de météorologie spatiale - 2014-03-05 diffusé à 18:07 TU (13:07 HNE)

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## Space Weather Bulletin - 2014-03-05 issued at 18:07 UT (13:07 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:00 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been low.

### Interplanetary

Interplanetary activity has been moderate.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** March-06-14 1:59 PM

**Subject:** Space Weather Bulletin - 2014-03-06 issued at 18:45 UT (13:45 EST) / Bulletin de météorologie spatiale - 2014-03-06 diffusé à 18:45 TU (13:45 HNE)

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## Space Weather Bulletin - 2014-03-06 issued at 18:45 UT (13:45 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:30 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: unsettled

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

## **Solar**

Solar activity has been low.

Two medium coronal holes are located near the centre of the solar disk.

## **Interplanetary**

Interplanetary activity has been moderate.

## **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** March-07-14 4:54 PM

**Subject:** Space Weather Bulletin - 2014-03-07 issued at 21:52 UT (16:52 EST) / Bulletin de météorologie spatiale - 2014-03-07 diffusé à 21:52 TU (16:52 HNE)

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## **Space Weather Bulletin - 2014-03-07 issued at 21:52 UT (16:52 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (21:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

**Solar**

Solar activity has been low.

Two medium coronal holes are located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** March-08-14 2:38 PM

**Subject:** Space Weather Bulletin - 2014-03-08 issued at 19:52 UT (14:52 EST) / Bulletin de météorologie spatiale - 2014-03-08 diffusé à 19:52 TU (14:52 HNE)

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**Space Weather Bulletin - 2014-03-08 issued at 19:52 UT (14:52 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions ( 19:45 UT)****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

## Solar

Solar activity has been low.

Two medium coronal holes are located near the centre of the solar disk.

## Interplanetary

Interplanetary activity has been low.

## Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** March-09-14 7:28 PM

**Subject:** Space Weather Bulletin - 2014-03-09 issued at 22:32 UT (17:32 EST) / Bulletin de météorologie spatiale - 2014-03-08 diffusé à 22:32 TU (17:32 HNE)

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## Space Weather Bulletin - 2014-03-09 issued at 22:32 UT (17:32 EST)

### Summary

- \* There is currently no major storm watch in effect.
- \* See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions ( 22:15 UT)

#### Geomagnetic Activity:

- \* polar cap zone: quiet
- \* auroral zone: quiet
- \* sub-auroral zone: quiet

#### Environment at Geostationary orbit:

- \* energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

- \* Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

- \* polar cap zone: quiet
- \* auroral zone: quiet
- \* sub-auroral zone: quiet

#### Environment at Geostationary orbit:

- \* energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

- \* Impacts are not expected.

### Detailed Information

## Solar

- \* Solar activity has been low.
- \* Two medium coronal holes are located near the centre of the solar disk.

## Interplanetary

- \* Interplanetary activity has been low.

## Environment at Geostationary orbit

- \* Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.
- \* Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

- \* Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.
- \* Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.
- \* Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** March-10-14 3:10 PM

**Subject:** Space Weather Bulletin - 2014-03-10 issued at 19:09 UT (14:09 EST) / Bulletin de météorologie spatiale - 2014-03-10 diffusé à 19:09 TU (14:09 HNE)

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## Space Weather Bulletin - 2014-03-10 issued at 19:09 UT (14:09 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (19:00 UT)

#### Geomagnetic Activity:

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

## **Solar**

Solar activity has been low.

Three coronal holes are located near the centre of the solar disk.

## **Interplanetary**

Interplanetary activity has been low.

## **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** March-11-14 3:15 PM

**Subject:** Space Weather Bulletin - 2014-03-11 issued at 19:12 UT (14:12 EST) / Bulletin de météorologie spatiale - 2014-03-11 diffusé à 19:12 TU (14:12 HNE)

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## **Space Weather Bulletin - 2014-03-11 issued at 19:12 UT (14:12 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

## Solar

Solar activity has been moderate.

Two medium solar x-ray flares have erupted over the past 24 hours.

## Interplanetary

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

## Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** March-12-14 2:29 PM

**Subject:** Space Weather Bulletin - 2014-03-12 issued at 18:23 UT (13:23 EST) / Bulletin de météorologie spatiale - 2014-03-12 diffusé à 18:23 TU (13:23 HNE)

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## Space Weather Bulletin - 2014-03-12 issued at 18:23 UT (13:23 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:00 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been low.

An M (medium) solar x-ray flare erupted 12 MAR 2014 10:55 UT near the edge of the solar disk.

### Interplanetary

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** March-13-14 3:34 PM

**Subject:** Space Weather Bulletin - 2014-03-13 issued at 19:30 UT (14:30 EST) / Bulletin de météorologie spatiale - 2014-03-13 diffusé à 19:30 TU (14:30 HNE)

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## Space Weather Bulletin - 2014-03-13 issued at 19:30 UT (14:30 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (19:15 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

An M (medium) solar x-ray flare erupted 12 MAR 2014 22:28 UT near the edge of the solar disk.

#### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** March-14-14 2:54 PM

**Subject:** Space Weather Bulletin - 2014-03-14 issued at 18:51 UT (13:51 EST) / Bulletin de météorologie spatiale - 2014-03-14 diffusé à 18:51 TU (13:51 HNE)

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### **Space Weather Bulletin - 2014-03-14 issued at 18:51 UT (13:51 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (18:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** March-15-14 2:53 PM

**Subject:** Space Weather Bulletin - 2014-03-15 issued at 18:50 UT (13:50 EST) / Bulletin de météorologie spatiale - 2014-03-15 diffusé à 18:50 TU (13:50 HNE)

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**Space Weather Bulletin - 2014-03-15 issued at 18:50 UT (13:50 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sfll-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** March-16-14 2:53 PM

**Subject:** Space Weather Bulletin - 2014-03-16 issued at 18:50 UT (13:50 EST) / Bulletin de météorologie spatiale - 2014-03-16 diffusé à 18:50 TU (13:50 HNE)

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**Space Weather Bulletin - 2014-03-16 issued at 18:50 UT (13:50 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:30 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sfll-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** March-17-14 2:10 PM

**Subject:** Space Weather Bulletin - 2014-03-17 issued at 18:08 UT (13:08 EST) / Bulletin de météorologie spatiale - 2014-03-17 diffusé à 18:08 TU (13:08 HNE)

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**Space Weather Bulletin - 2014-03-17 issued at 18:08 UT (13:08 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:00 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** March-18-14 2:10 PM

**Subject:** Space Weather Bulletin - 2014-03-18 issued at 18:06 UT (13:06 EST) / Bulletin de météorologie spatiale - 2014-03-18 diffusé à 18:06 TU (13:06 HNE)

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**Space Weather Bulletin - 2014-03-18 issued at 18:06 UT (13:06 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:00 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sfpl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** March-19-14 2:35 PM

**Subject:** Space Weather Bulletin - 2014-03-19 issued at 18:31 UT (13:31 EST) / Bulletin de météorologie spatiale - 2014-03-19 diffusé à 18:31 TU (13:31 HNE)

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**Space Weather Bulletin - 2014-03-19 issued at 18:31 UT (13:31 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** March-20-14 2:21 PM

**Subject:** Space Weather Bulletin - 2014-03-20 issued at 18:17 UT (13:17 EST) / Bulletin de météorologie spatiale - 2014-03-20 diffusé à 18:17 TU (13:17 HNE)

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**Space Weather Bulletin - 2014-03-20 issued at 18:17 UT (13:17 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:00 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** March-21-14 3:32 PM

**Subject:** Space Weather Bulletin - 2014-03-21 issued at 19:30 UT (14:30 EST) / Bulletin de météorologie spatiale - 2014-03-21 diffusé à 19:30 TU (14:30 HNE)

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**Space Weather Bulletin - 2014-03-21 issued at 19:30 UT (14:30 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:15 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

One small coronal hole is located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** March-22-14 6:03 PM

**Subject:** Space Weather Bulletin - 2014-03-22 issued at 22:00 UT (17:00 EST) / Bulletin de météorologie spatiale - 2014-03-22 diffusé à 22:00 TU (17:00 HNE)

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**Space Weather Bulletin - 2014-03-22 issued at 22:00 UT (17:00 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:45 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** March-23-14 2:12 PM

**Subject:** Space Weather Bulletin - 2014-03-23 issued at 18:06 UT (13:06 EST) / Bulletin de météorologie spatiale - 2014-03-23 diffusé à 18:06 TU (13:06 HNE)

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**Space Weather Bulletin - 2014-03-23 issued at 18:06 UT (13:06 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:00 UT)****Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|Bz| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** March-24-14 3:12 PM

**Subject:** Space Weather Bulletin - 2014-03-24 issued at 19:07 UT (14:07 EST) / Bulletin de météorologie spatiale - 2014-03-24 diffusé à 19:07 TU (14:07 HNE)

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**Space Weather Bulletin - 2014-03-24 issued at 19:07 UT (14:07 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:00 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** March-25-14 5:12 PM

**Subject:** Space Weather Bulletin - 2014-03-25 issued at 21:10 UT (16:10 EST) / Bulletin de météorologie spatiale - 2014-03-25 diffusé à 21:10 TU (16:10 HNE)

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**Space Weather Bulletin - 2014-03-25 issued at 21:10 UT (16:10 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:00 UT)**

**Geomagnetic Activity:**

polar cap zone: stormy  
auroral zone: unsettled  
sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: quiet  
sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|Bz| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** March-26-14 6:31 PM

**Subject:** Space Weather Bulletin - 2014-03-26 issued at 22:27 UT (17:27 EST) / Bulletin de météorologie spatiale - 2014-03-26 diffusé à 22:27 TU (17:27 HNE)

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**Space Weather Bulletin - 2014-03-26 issued at 22:27 UT (17:27 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (22:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** March-27-14 4:44 PM

**Subject:** Space Weather Bulletin - 2014-03-27 issued at 20:42 UT (15:42 EST) / Bulletin de météorologie spatiale - 2014-03-27 diffusé à 20:42 TU (15:42 HNE)

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**Space Weather Bulletin - 2014-03-27 issued at 20:42 UT (15:42 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:30 UT)**

**Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** March-28-14 7:04 PM

**Subject:** Space Weather Bulletin - 2014-03-28 issued at 23:02 UT (18:02 EST) / Bulletin de météorologie spatiale - 2014-03-28 diffusé à 23:02 TU (18:02 HNE)

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**Space Weather Bulletin - 2014-03-28 issued at 23:02 UT (18:02 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (22:45 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** March-29-14 3:49 PM

**Subject:** Space Weather Bulletin - 2014-03-29 issued at 19:44 UT (14:44 EST) / Bulletin de météorologie spatiale - 2014-03-29 diffusé à 19:44 TU (14:44 HNE)

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**Space Weather Bulletin - 2014-03-29 issued at 19:44 UT (14:44 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:30 UT)****Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** March-30-14 5:00 PM

**Subject:** Space Weather Bulletin - 2014-03-30 issued at 20:58 UT (15:58 EST) / Bulletin de météorologie spatiale - 2014-03-30 diffusé à 20:58 TU (15:58 HNE)

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**Space Weather Bulletin - 2014-03-30 issued at 20:58 UT (15:58 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:45 UT)****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been moderate.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone. Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** March-31-14 4:45 PM

**Subject:** Space Weather Bulletin - 2014-03-31 issued at 20:44 UT (15:44 EST) / Bulletin de météorologie spatiale - 2014-03-31 diffusé à 20:44 TU (15:44 HNE)

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**Space Weather Bulletin - 2014-03-31 issued at 20:44 UT (15:44 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been moderate.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** April-01-14 4:48 PM

**Subject:** Space Weather Bulletin - 2014-04-01 issued at 20:46 UT (15:46 EST) / Bulletin de météorologie spatiale - 2014-04-01 diffusé à 20:46 TU (15:46 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-01 issued at 20:46 UT (15:46 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:30 UT)****Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been moderate.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** April-02-14 4:51 PM

**Subject:** Space Weather Bulletin - 2014-04-02 issued at 20:47 UT (15:47 EST) / Bulletin de météorologie spatiale - 2014-04-02 diffusé à 20:47 TU (15:47 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-02 issued at 20:47 UT (15:47 EST)**

**Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions due to solar activity observed on 02 APR 2014 are not expected.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

The active region located near the east limb of the solar disk has produced a solar x-ray flare and an associated CME.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** April-03-14 4:14 PM

**Subject:** Space Weather Bulletin - 2014-04-03 issued at 20:12 UT (15:12 EST) / Bulletin de météorologie spatiale - 2014-04-03 diffusé à 20:12 TU (15:12 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-03 issued at 20:12 UT (15:12 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:00 UT)**

**Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: unavailable

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with active intervals  
auroral zone: quiet with active intervals  
sub-auroral zone: quiet with active intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been moderate.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** April-04-14 5:46 PM

**To:** SW\_bulletin@geolab.nrcan.gc.ca

**Subject:** Space Weather Bulletin - 2014-04-04 issued at 21:44 UT (16:44 EST) / Bulletin de météorologie spatiale - 2014-04-04 diffusé à 21:44 TU (16:44 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-04 issued at 21:44 UT (16:44 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

## 24 Hour Forecast

### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

### Possible Impacts on Technology:

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been moderate.

### Interplanetary

The solar wind speed is currently slow (400-500 km/s).

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** April-05-14 4:51 PM

**Subject:** Space Weather Bulletin - 2014-04-05 issued at 20:45 UT (15:45 EST) / Bulletin de météorologie spatiale - 2014-04-05 diffusé à 20:45 TU (15:45 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-04-05 issued at 20:45 UT (15:45 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (20:30 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been moderate.

##### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** April-06-14 4:02 PM

**Subject:** Space Weather Bulletin - 2014-04-06 issued at 20:00 UT (15:00 EST) / Bulletin de météorologie spatiale - 2014-04-06 diffusé à 20:00 TU (15:00 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-04-06 issued at 20:00 UT (15:00 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (19:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** April-07-14 4:28 PM

**Subject:** Space Weather Bulletin - 2014-04-07 issued at 20:26 UT (15:26 EST) / Bulletin de météorologie spatiale - 2014-04-07 diffusé à 20:26 TU (15:26 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-07 issued at 20:26 UT (15:26 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:15 UT)**

**Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-08-14 2:26 PM

**Subject:** Space Weather Bulletin - 2014-04-08 issued at 18:23 UT (13:23 EST) / Bulletin de météorologie spatiale - 2014-04-08 diffusé à 18:23 TU (13:23 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-08 issued at 18:23 UT (13:23 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)****Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-09-14 3:54 PM

**Subject:** Space Weather Bulletin - 2014-04-09 issued at 19:51 UT (14:51 EST) / Bulletin de météorologie spatiale - 2014-04-09 diffusé à 19:51 TU (14:51 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-09 issued at 19:51 UT (14:51 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:45 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.  
Two coronal holes are located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.  
Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-10-14 2:31 PM

**Subject:** Space Weather Bulletin - 2014-04-10 issued at 18:29 UT (13:29 EST) / Bulletin de météorologie spatiale - 2014-04-10 diffusé à 18:29 TU (13:29 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-10 issued at 18:29 UT (13:29 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.  
Two coronal holes are located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-11-14 1:52 PM

**Subject:** Space Weather Bulletin - 2014-04-11 issued at 17:50 UT (12:50 EST) / Bulletin de météorologie spatiale - 2014-04-11 diffusé à 17:50 TU (12:50 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-11 issued at 17:50 UT (12:50 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: unsettled  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.  
Two coronal holes are located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-12-14 4:50 PM

**Subject:** Space Weather Bulletin - 2014-04-12 issued at 20:48 UT (15:48 EST) / Bulletin de météorologie spatiale - 2014-04-12 diffusé à 20:48 TU (15:48 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-12 issued at 20:48 UT (15:48 EST)**

## Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (20:30 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: unsettled

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: unsettled

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been low.

One coronal hole is located near the centre of the solar disk.

One coronal hole is located near the edge of the solar disk.

#### Interplanetary

Interplanetary activity has been low.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and unsettled with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and unsettled in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-13-14 4:39 PM

**Subject:** Space Weather Bulletin - 2014-04-13 issued at 20:37 UT (15:37 EST) / Bulletin de météorologie spatiale - 2014-04-13 diffusé à 20:37 TU (15:37 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-04-13 issued at 20:37 UT (15:37 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (20:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: unsettled

sub-auroral zone: unsettled

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

#### **Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

One coronal hole is located near the edge of the solar disk.

#### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

---

**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-14-14 2:45 PM

**Subject:** Space Weather Bulletin - 2014-04-14 issued at 18:42 UT (13:42 EST) / Bulletin de météorologie spatiale - 2014-04-14 diffusé à 18:42 TU (13:42 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-04-14 issued at 18:42 UT (13:42 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:30 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

### Detailed Information

#### Solar

Solar activity has been low.

One coronal hole is located near the edge of the solar disk.

#### Interplanetary

Interplanetary activity has been low.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-15-14 2:14 PM

**Subject:** Space Weather Bulletin - 2014-04-15 issued at 18:10 UT (13:10 EST) / Bulletin de météorologie spatiale - 2014-04-15 diffusé à 18:10 TU (13:10 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-15 issued at 18:10 UT (13:10 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:00 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-16-14 2:22 PM

**Subject:** Space Weather Bulletin - 2014-04-16 issued at 18:20 UT (13:20 EST) / Bulletin de météorologie spatiale - 2014-04-16 diffusé à 18:20 TU (13:20 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-04-16 issued at 18:20 UT (13:20 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:15 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-17-14 2:43 PM

**Subject:** Space Weather Bulletin - 2014-04-17 issued at 18:41 UT (13:41 EST) / Bulletin de météorologie spatiale - 2014-04-17 diffusé à 18:41 TU (13:41 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-04-17 issued at 18:41 UT (13:41 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: unsettled

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: unsettled

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-18-14 3:02 PM

**Subject:** Space Weather Bulletin - 2014-04-18 issued at 18:57 UT (13:57 EST) / Bulletin de météorologie spatiale - 2014-04-18 diffusé à 18:57 TU (13:57 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-18 issued at 18:57 UT (13:57 EST)**

**Summary**

There is currently no major storm watch in effect.

A polar cap absorption event is currently in progress in the polar cap zone.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:45 UT)**

**Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information**

**Solar**

Solar activity has been moderate.

An M (medium) solar x-ray flare erupted 18 APR 2014 1231.

**Interplanetary**

Interplanetary activity has been low.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-19-14 2:49 PM

**Subject:** Space Weather Bulletin - 2014-04-19 issued at 18:46 UT (13:46 EST) / Bulletin de météorologie spatiale - 2014-04-19 diffusé à 18:46 TU (13:46 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-04-19 issued at 18:46 UT (13:46 EST)**

#### **Summary**

There is currently no major storm watch in effect.

A polar cap absorption event is currently in progress in the polar cap zone.

An Earth-directed CME erupted on 18 APR 2014 13:25 UT and is expected to reach the Earth on 20 APR 2014, resulting in disturbed geomagnetic activity.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (18:30 UT)**

##### **Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: unsettled

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: active with stormy intervals

auroral zone: active with stormy intervals

sub-auroral zone: quiet with stormy intervals

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap, auroral, and sub-auroral zones.

Directional Drilling: Potential for deviations in the polar cap, auroral, and sub-auroral zones.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been active with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-20-14 3:46 PM

**Subject:** Space Weather Bulletin - 2014-04-20 issued at 19:43 UT (14:43 EST) / Bulletin de météorologie spatiale - 2014-04-20 diffusé à 19:43 TU (14:43 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-04-20 issued at 19:43 UT (14:43 EST)**

#### **Summary**

There is currently no major storm watch in effect.

The polar cap absorption event that began 18 APR 2014 15:25 UT in the polar cap zone ended 20 APR 2014 11:55 UT.

Stormy conditions are possible in the polar cap, auroral, and sub-auroral zones within the next 24 hours.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (19:30 UT)**

##### **Geomagnetic Activity:**

polar cap zone: major storm

auroral zone: active

sub-auroral zone: unsettled

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for severe disruptions in the polar cap zone.

Directional Drilling: Potential for severe deviations in the polar cap zone.

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

#### **24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: stormy  
auroral zone: active with stormy intervals  
sub-auroral zone: unsettled with stormy intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.  
Directional Drilling: Potential for significant deviations in the polar cap zone.  
Aeromagnetic surveys: Potential for disruptions in the auroral and sub-auroral zones.  
Directional Drilling: Potential for deviations in the auroral and sub-auroral zones.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been moderate.  
An interplanetary shock has been observed on 20 APR 2014 10:23 UT.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been active with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be stormy in the polar zone, active with stormy intervals in the auroral zone, and unsettled with stormy intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-21-14 3:10 PM

**Subject:** Space Weather Bulletin - 2014-04-21 issued at 19:07 UT (14:07 EST) / Bulletin de météorologie spatiale - 2014-04-21 diffusé à 19:07 TU (14:07 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-21 issued at 19:07 UT (14:07 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:45 UT)****Geomagnetic Activity:**

polar cap zone: active  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: active with stormy intervals

auroral zone: active with stormy intervals

sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been moderate.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been active with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and unsettled with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and unsettled in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** April-22-14 1:59 PM

**Subject:** Space Weather Bulletin - 2014-04-22 issued at 17:56 UT (12:56 EST) / Bulletin de météorologie spatiale - 2014-04-22 diffusé à 17:56 TU (12:56 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-22 issued at 17:56 UT (12:56 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:45 UT)****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** April-23-14 2:45 PM

**Subject:** Space Weather Bulletin - 2014-04-23 issued at 18:44 UT (13:44 EST) / Bulletin de météorologie spatiale - 2014-04-23 diffusé à 18:44 TU (13:44 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-23 issued at 18:44 UT (13:44 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:30 UT)**

**Geomagnetic Activity:**

polar cap zone: stormy  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been moderate.

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

The solar wind speed is currently slow (400-500 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** April-24-14 2:48 PM

**Subject:** Space Weather Bulletin - 2014-04-24 issued at 18:47 UT (13:47 EST) / Bulletin de météorologie spatiale - 2014-04-24 diffusé à 18:47 TU (13:47 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-24 issued at 18:47 UT (13:47 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

Interplanetary activity has been moderate.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** April-25-14 4:06 PM

**Subject:** Space Weather Bulletin - 2014-04-25 issued at 20:05 UT (15:05 EST) / Bulletin de météorologie spatiale - 2014-04-25 diffusé à 20:05 TU (15:05 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-04-25 issued at 20:05 UT (15:05 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (19:45 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: unsettled

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: unsettled

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been moderate.

An X (large) solar x-ray flare erupted 24 Apr 2014 00:22 UT near the edge of the solar disk.

A slow non-Earth-directed CME erupted on 24 Apr 2014 00:22 UT.

#### Interplanetary

Interplanetary activity has been low.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** April-26-14 2:12 PM

**Subject:** Space Weather Bulletin - 2014-04-26 issued at 18:11 UT (13:11 EST) / Bulletin de météorologie spatiale - 2014-04-26 diffusé à 18:11 TU (13:11 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-04-26 issued at 18:11 UT (13:11 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (17:45 UT)

#### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: unsettled

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: moderate

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been low.

#### Interplanetary

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** April-27-14 1:53 PM

**Subject:** Space Weather Bulletin - 2014-04-27 issued at 17:52 UT (12:52 EST) / Bulletin de météorologie spatiale - 2014-04-27 diffusé à 17:52 TU (12:52 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-04-27 issued at 17:52 UT (12:52 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (17:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

##### **Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

##### **Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** April-28-14 1:45 PM

**Subject:** Space Weather Bulletin - 2014-04-28 issued at 17:44 UT (12:44 EST) / Bulletin de météorologie spatiale - 2014-04-28 diffusé à 17:44 TU (12:44 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-04-28 issued at 17:44 UT (12:44 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** April-29-14 2:47 PM

**Subject:** Space Weather Bulletin - 2014-04-29 issued at 18:45 UT (13:45 EST) / Bulletin de météorologie spatiale - 2014-04-29 diffusé à 18:45 TU (13:45 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-04-29 issued at 18:45 UT (13:45 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (18:30 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

##### **Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** April-30-14 2:50 PM

**Subject:** Space Weather Bulletin - 2014-04-30 issued at 18:49 UT (13:49 EST) / Bulletin de météorologie spatiale - 2014-04-30 diffusé à 18:49 TU (13:49 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-04-30 issued at 18:49 UT (13:49 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (18:30 UT)**

###### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: active

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with stormy intervals

sub-auroral zone: quiet with unsettled intervals

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **Detailed Information**

###### **Solar**

Solar activity has been low.

### **Interplanetary**

Interplanetary activity has been moderate.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** May-01-14 3:54 PM

**Subject:** Space Weather Bulletin - 2014-05-01 issued at 19:53 UT (14:53 EST) / Bulletin de météorologie spatiale - 2014-05-01 diffusé à 19:53 TU (14:53 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-05-01 issued at 19:53 UT (14:53 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (19:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** May-02-14 2:23 PM

**Subject:** Space Weather Bulletin - 2014-05-02 issued at 18:22 UT (13:22 EST) / Bulletin de météorologie spatiale - 2014-05-02 diffusé à 18:22 TU (13:22 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-02 issued at 18:22 UT (13:22 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** May-03-14 6:44 PM

**Subject:** Space Weather Bulletin - 2014-05-03 issued at 22:43 UT (17:43 EST) / Bulletin de météorologie spatiale - 2014-05-03 diffusé à 22:43 TU (17:43 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-03 issued at 22:43 UT (17:43 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (22:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: unsettled

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: unavailable

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been moderate.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit for 02 MAY 2014 is unavailable but is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** May-04-14 1:28 PM

**Subject:** Space Weather Bulletin - 2014-05-04 issued at 17:27 UT (12:27 EST) / Bulletin de météorologie spatiale - 2014-05-04 diffusé à 17:27 TU (12:27 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-04 issued at 17:27 UT (12:27 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:15 UT)****Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.  
The solar wind speed is currently very slow (< 400 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit for 03 MAY 2014 is unavailable but is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** May-05-14 1:49 PM

**Subject:** Space Weather Bulletin - 2014-05-05 issued at 17:47 UT (12:47 EST) / Bulletin de météorologie spatiale - 2014-05-05 diffusé à 17:47 TU (12:47 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-05 issued at 17:47 UT (12:47 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:30 UT)****Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with active intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.  
The solar wind speed is currently very slow (< 400 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.  
Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** May-06-14 1:35 PM

**Subject:** Space Weather Bulletin - 2014-05-06 issued at 17:30 UT (12:30 EST) / Bulletin de météorologie spatiale - 2014-05-06 diffusé à 17:30 TU (12:30 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-06 issued at 17:30 UT (12:30 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:15 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active  
auroral zone: quiet  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals  
auroral zone: quiet  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** May-07-14 3:39 PM

**Subject:** Space Weather Bulletin - 2014-05-07 issued at 19:36 UT (14:36 EST) / Bulletin de météorologie spatiale - 2014-05-07 diffusé à 19:36 TU (14:36 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-07 issued at 19:36 UT (14:36 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:15 UT)**

**Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been primarily negative at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** May-08-14 2:03 PM

**Subject:** Space Weather Bulletin - 2014-05-08 issued at 17:59 UT (12:59 EST) / Bulletin de météorologie spatiale - 2014-05-08 diffusé à 17:59 TU (12:59 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-05-08 issued at 17:59 UT (12:59 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (17:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: active

sub-auroral zone: unsettled

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

An M (medium) solar x-ray flare erupted 08 May 2014 09:20 UT.

##### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been primarily negative at moderate ( $|B_z| < 10$  nT) levels.

Prolonged periods of negative interplanetary magnetic field are often associated with increased geomagnetic activity.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** May-09-14 2:59 PM

**Subject:** Space Weather Bulletin - 2014-05-09 issued at 18:49 UT (13:49 EST) / Bulletin de météorologie spatiale - 2014-05-09 diffusé à 18:49 TU (13:49 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-05-09 issued at 18:49 UT (13:49 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (18:15 UT)**

##### **Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

Directional Drilling: Potential for deviations in the auroral zone.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

## Interplanetary

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

## Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** May-10-14 3:43 PM

**Subject:** Space Weather Bulletin - 2014-05-10 issued at 19:41 UT (14:41 EST) / Bulletin de météorologie spatiale - 2014-05-10 diffusé à 19:41 TU (14:41 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-05-10 issued at 19:41 UT (14:41 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (19:30 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: unsettled

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### Detailed Information

#### Solar

Solar activity has been low.

#### Interplanetary

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|Bz| < 10$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** May-11-14 3:51 PM

**Subject:** Space Weather Bulletin - 2014-05-11 issued at 19:47 UT (14:47 EST) / Bulletin de météorologie spatiale - 2014-05-11 diffusé à 19:47 TU (14:47 HNE)

La version française du bulletin suit.

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### Space Weather Bulletin - 2014-05-11 issued at 19:47 UT (14:47 EST)

#### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### Current Conditions (19:30 UT)

##### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: unsettled

sub-auroral zone: quiet

##### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

##### Possible Impacts on Technology:

Impacts are not expected.

#### 24 Hour Forecast

##### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

##### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

**Detailed Information**

**Solar**

Solar activity has been low.

One small coronal hole is located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently very slow (~ 400 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** May-12-14 2:26 PM

**Subject:** Space Weather Bulletin - 2014-05-12 issued at 18:20 UT (13:20 EST) / Bulletin de météorologie spatiale - 2014-05-12 diffusé à 18:20 TU (13:20 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-12 issued at 18:20 UT (13:20 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:00 UT)**

**Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.  
Directional Drilling: Potential for deviations in the polar cap and auroral zones.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

##### **Interplanetary**

The solar wind speed is currently very slow (~ 400 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** May-13-14 1:39 PM

**Subject:** Space Weather Bulletin - 2014-05-13 issued at 17:34 UT (12:34 EST) / Bulletin de météorologie spatiale - 2014-05-13 diffusé à 17:34 TU (12:34 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-05-13 issued at 17:34 UT (12:34 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (17:15 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information**

**Solar**

Solar activity has been low.

One small coronal hole is located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** May-14-14 4:49 PM

**Subject:** Space Weather Bulletin - 2014-05-14 issued at 20:46 UT (15:46 EST) / Bulletin de météorologie spatiale - 2014-05-14 diffusé à 20:46 TU (15:46 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-14 issued at 20:46 UT (15:46 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:30 UT)****Geomagnetic Activity:**

polar cap zone: active  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled with active intervals  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information****Solar**

Solar activity has been low.  
One small coronal hole is located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** May-15-14 2:17 PM

**Subject:** Space Weather Bulletin - 2014-05-15 issued at 18:12 UT (13:12 EST) / Bulletin de météorologie spatiale - 2014-05-15 diffusé à 18:12 TU (13:12 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-15 issued at 18:12 UT (13:12 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:45 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).  
The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** May-16-14 2:16 PM

**Subject:** Space Weather Bulletin - 2014-05-16 issued at 18:10 UT (13:10 EST) / Bulletin de météorologie spatiale - 2014-05-16 diffusé à 18:10 TU (13:10 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-05-16 issued at 18:10 UT (13:10 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|Bz| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** May-17-14 2:55 PM

**Subject:** Space Weather Bulletin - 2014-05-17 issued at 18:52 UT (13:52 EST) / Bulletin de météorologie spatiale - 2014-05-17 diffusé à 18:52 TU (13:52 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-05-17 issued at 18:52 UT (13:52 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** May-18-14 1:29 PM

**Subject:** Space Weather Bulletin - 2014-05-18 issued at 17:27 UT (12:27 EST) / Bulletin de météorologie spatiale - 2014-05-18 diffusé à 17:27 TU (12:27 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-18 issued at 17:27 UT (12:27 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:15 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: unavailable

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit for 17 MAY 2014 is unavailable but is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** May-19-14 2:18 PM

**Subject:** Space Weather Bulletin - 2014-05-19 issued at 18:14 UT (13:14 EST) / Bulletin de météorologie spatiale - 2014-05-19 diffusé à 18:14 TU (13:14 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-05-19 issued at 18:14 UT (13:14 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:00 UT)

#### Geomagnetic Activity:

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with stormy intervals

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### Detailed Information

#### Solar

Solar activity has been low.

#### Interplanetary

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** May-20-14 4:45 PM

**Subject:** Space Weather Bulletin - 2014-05-20 issued at 20:44 UT (15:44 EST) / Bulletin de météorologie spatiale - 2014-05-20 diffusé à 20:44 TU (15:44 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-05-20 issued at 20:44 UT (15:44 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (20:30 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Directional Drilling: Potential for deviations in the polar cap zone.

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

## Interplanetary

Interplanetary activity has been low.

## Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa

**Sent:** May 21, 2014 16:53

**Subject:** Space Weather Bulletin - 2014-05-21 issued at 20:51 UT (15:51 EST) / Bulletin de météorologie spatiale - 2014-05-21 diffusé à 20:51 TU (15:51 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-05-21 issued at 20:51 UT (15:51 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (20:30 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** May-22-14 4:59 PM

**Subject:** Space Weather Bulletin - 2014-05-22 issued at 20:58 UT (15:58 EST) / Bulletin de météorologie spatiale - 2014-05-22 diffusé à 20:58 TU (15:58 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-22 issued at 20:58 UT (15:58 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:45 UT)****Geomagnetic Activity:**

polar cap zone: active

auroral zone: unsettled

sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: quiet

sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

Three small coronal holes are located near the centre of the solar disk.

#### **Interplanetary**

Interplanetary activity has been low.

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

Prolonged periods of negative interplanetary magnetic field are often associated with increased geomagnetic activity.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** May-23-14 4:11 PM

**Subject:** Space Weather Bulletin - 2014-05-23 issued at 20:10 UT (15:10 EST) / Bulletin de météorologie spatiale - 2014-05-23 diffusé à 20:10 TU (15:10 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-05-23 issued at 20:10 UT (15:10 EST)**

#### **Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 23 May 2014 to 25 May 2014 due to high speed streams from coronal holes.

#### **Current Conditions (20:00 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: active

sub-auroral zone: unsettled

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

#### **24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.  
Two medium coronal holes are located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been moderate.  
Moderate solar wind speeds are due to high speed streams from coronal holes.  
The interplanetary magnetic field has been fluctuating at moderate ( $|Bz| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** May-24-14 6:31 PM

**Subject:** Space Weather Bulletin - 2014-05-24 issued at 22:30 UT (17:30 EST) / Bulletin de météorologie spatiale - 2014-05-24 diffusé à 22:30 TU (17:30 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-24 issued at 22:30 UT (17:30 EST)****Summary**

There is currently no major storm watch in effect.  
Disturbed geomagnetic conditions are expected 24 May 2014 to 25 May 2014 due to high speed streams from coronal holes.  
See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (22:15 UT)****Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with active intervals  
auroral zone: unsettled  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.  
An M (medium) solar x-ray flare erupted 24 May 2014 18:26 UT.

**Interplanetary**

Interplanetary activity has been moderate.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.  
Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** May-25-14 3:51 PM

**Subject:** Space Weather Bulletin - 2014-05-25 issued at 19:49 UT (14:49 EST) / Bulletin de météorologie spatiale - 2014-05-25 diffusé à 19:49 TU (14:49 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-25 issued at 19:49 UT (14:49 EST)**

**Summary**

There is currently no major storm watch in effect.  
See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:30 UT)**

**Geomagnetic Activity:**

polar cap zone: active  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** May-26-14 2:01 PM

**Subject:** Space Weather Bulletin - 2014-05-26 issued at 18:00 UT (13:00 EST) / Bulletin de météorologie spatiale - 2014-05-26 diffusé à 18:00 TU (13:00 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-26 issued at 18:00 UT (13:00 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: quiet  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals  
auroral zone: quiet  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** May-27-14 4:29 PM

**Subject:** Space Weather Bulletin - 2014-05-27 issued at 20:28 UT (15:28 EST) / Bulletin de météorologie spatiale - 2014-05-27 diffusé à 20:28 TU (15:28 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-27 issued at 20:28 UT (15:28 EST)**

### **Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 28 May 2014 to 29 May 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (20:15 UT)**

#### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

Two small coronal holes are located near the centre of the solar disk.

#### **Interplanetary**

Interplanetary activity has been low.

Moderate solar wind speeds are due to high speed streams from coronal holes.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** May-28-14 4:24 PM

**Subject:** Space Weather Bulletin - 2014-05-28 issued at 20:23 UT (15:23 EST) / Bulletin de météorologie spatiale - 2014-05-28 diffusé à 20:23 TU (15:23 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-28 issued at 20:23 UT (15:23 EST)**

**Summary**

There is currently no major storm watch in effect.

**Current Conditions (20:15 UT)**

**Geomagnetic Activity:**

polar cap zone: active  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with active intervals  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.  
Two small coronal holes are located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** May-29-14 5:55 PM

**Subject:** Space Weather Bulletin - 2014-05-29 issued at 21:32 UT (16:32 EST) / Bulletin de météorologie spatiale - 2014-05-29 diffusé à 21:32 TU (16:32 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-05-29 issued at 21:32 UT (16:32 EST)**

### **Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 29 May 2014 to 30 May 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (21:15 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

Three small coronal holes are located near the centre of the solar disk.

#### **Interplanetary**

Interplanetary activity has been low.

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** May-30-14 4:21 PM

**Subject:** Space Weather Bulletin - 2014-05-30 issued at 20:18 UT (15:18 EST) / Bulletin de météorologie spatiale - 2014-05-30 diffusé à 20:18 TU (15:18 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-05-30 issued at 20:18 UT (15:18 EST)**

**Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 30 May 2014 to 31 May 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:00 UT)**

**Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: active

sub-auroral zone: active

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

Two small coronal holes are located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

The interplanetary magnetic field has been fluctuating at high ( $|B_z| < 20$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** May-31-14 7:07 PM

**Subject:** Space Weather Bulletin - 2014-05-31 issued at 23:06 UT (18:06 EST) / Bulletin de météorologie spatiale - 2014-05-31 diffusé à 23:06 TU (18:06 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-05-31 issued at 23:06 UT (18:06 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (22:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

One small coronal hole is located near the centre of the solar disk.

## Interplanetary

Interplanetary activity has been low.

## Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** June-01-14 6:27 PM

**Subject:** Space Weather Bulletin - 2014-06-01 issued at 22:26 UT (17:26 EST) / Bulletin de météorologie spatiale - 2014-06-01 diffusé à 22:26 TU (17:26 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-06-01 issued at 22:26 UT (17:26 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (22:15 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been low.

Two small coronal holes are located near the centre of the solar disk.

### **Interplanetary**

Interplanetary activity has been low.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** June-02-14 3:23 PM

**Subject:** Space Weather Bulletin - 2014-06-02 issued at 19:23 UT (14:23 EST) / Bulletin de météorologie spatiale - 2014-06-02 diffusé à 19:23 TU (14:23 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-06-02 issued at 19:23 UT (14:23 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (19:15 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

Three small coronal holes are located near the centre of the solar disk.

#### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** June-03-14 4:29 PM

**Subject:** Space Weather Bulletin - 2014-06-03 issued at 20:27 UT (15:27 EST) / Bulletin de météorologie spatiale - 2014-06-03 diffusé à 20:27 TU (15:27 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-06-03 issued at 20:27 UT (15:27 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (20:15 UT)**

##### **Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

One medium coronal hole is located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** June-04-14 4:53 PM

**Subject:** Space Weather Bulletin - 2014-06-04 issued at 20:50 UT (15:50 EST) / Bulletin de météorologie spatiale - 2014-06-04 diffusé à 20:50 TU (15:50 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-06-04 issued at 20:50 UT (15:50 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:45 UT)****Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: unsettled

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled with active intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Two medium coronal holes are located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** June-05-14 4:36 PM

**Subject:** Space Weather Bulletin - 2014-06-05 issued at 20:34 UT (15:34 EST) / Bulletin de météorologie spatiale - 2014-06-05 diffusé à 20:34 TU (15:34 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-06-05 issued at 20:34 UT (15:34 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:15 UT)**

**Geomagnetic Activity:**

polar cap zone: active  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

## 24 Hour Forecast

### Geomagnetic Activity:

polar cap zone: unsettled with active intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

### Detailed Information

#### Solar

Three coronal holes are located near the edge of the solar disk.

#### Interplanetary

The solar wind speed is currently very slow (< 400 km/s).

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** June-06-14 4:21 PM

**Subject:** Space Weather Bulletin - 2014-06-06 issued at 20:19 UT (15:19 EST) / Bulletin de météorologie spatiale - 2014-06-06 diffusé à 20:19 TU (15:19 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-06-06 issued at 20:19 UT (15:19 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (20:00 UT)

#### Geomagnetic Activity:

polar cap zone: active  
auroral zone: quiet  
sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information****Solar**

One small coronal hole is located near the centre of the solar disk.

One large coronal hole elongated in longitude is located near the edge of the solar disk.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** June-07-14 5:03 PM

**Subject:** Space Weather Bulletin - 2014-06-07 issued at 21:00 UT (16:00 EST) / Bulletin de météorologie spatiale - 2014-06-07 diffusé à 21:00 TU (16:00 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-06-07 issued at 21:00 UT (16:00 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:45 UT)****Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: active  
sub-auroral zone: active

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: active with stormy intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information**

**Solar**

Three coronal holes are located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** June-08-14 4:49 PM

**Subject:** Space Weather Bulletin - 2014-06-08 issued at 20:47 UT (15:47 EST) / Bulletin de météorologie spatiale - 2014-06-08 diffusé à 20:47 TU (15:47 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-06-08 issued at 20:47 UT (15:47 EST)**

**Summary**

Stormy conditions are possible from 08 JUN 2014 20:00 UT to 09 JUN 2014 12:00 UT for the polar cap, auroral, and sub-auroral zones.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (20:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active  
auroral zone: unsettled  
sub-auroral zone: active

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap, auroral, and sub-auroral zones.  
Directional Drilling: Potential for significant deviations in the polar cap, auroral, and sub-auroral zones.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: active with stormy intervals  
auroral zone: active with stormy intervals  
sub-auroral zone: active

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap, auroral, and sub-auroral zones.  
Directional Drilling: Potential for significant deviations in the polar cap, auroral, and sub-auroral zones.

### **Detailed Information**

#### **Solar**

Two coronal holes are located near the centre of the solar disk.

#### **Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been stormy in the polar zone, active with stormy intervals in the auroral zone, and active with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and active in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** June-09-14 5:36 PM

**Subject:** Space Weather Bulletin - 2014-06-09 issued at 21:34 UT (16:34 EST) / Bulletin de météorologie spatiale - 2014-06-09 diffusé à 21:34 TU (16:34 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-06-09 issued at 21:34 UT (16:34 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

One small coronal hole is located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** June-10-14 5:56 PM

**Subject:** Space Weather Bulletin - 2014-06-10 issued at 21:54 UT (16:54 EST) / Bulletin de météorologie spatiale - 2014-06-10 diffusé à 21:54 TU (16:54 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-06-10 issued at 21:54 UT (16:54 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (21:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: unsettled

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: active with stormy intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **Detailed Information**

#### **Solar**

An X (large) solar x-ray flare erupted 10 JUN 2014 12:00 UT near the edge of the solar disk.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** June-11-14 4:43 PM

**Subject:** Space Weather Bulletin - 2014-06-11 issued at 20:41 UT (15:41 EST) / Bulletin de météorologie spatiale - 2014-06-11 diffusé à 20:41 TU (15:41 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-06-11 issued at 20:41 UT (15:41 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (20:30 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### Detailed Information

#### Solar

An M (medium) solar x-ray flare erupted 2014 JUN 11 09:00 UT near the edge of the solar disk.

#### Interplanetary

The solar wind speed is currently moderate (500-700 km/s).

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been active with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** June-12-14 4:40 PM

**Subject:** Space Weather Bulletin - 2014-06-12 issued at 20:38 UT (15:38 EST) / Bulletin de météorologie spatiale - 2014-06-12 diffusé à 20:38 TU (15:38 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-06-12 issued at 20:38 UT (15:38 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (20:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** June-13-14 4:41 PM

**Subject:** Space Weather Bulletin - 2014-06-13 issued at 20:39 UT (15:39 EST) / Bulletin de météorologie spatiale - 2014-06-13 diffusé à 20:39 TU (15:39 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-06-13 issued at 20:39 UT (15:39 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:30 UT)**

**Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: active with stormy intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information**

**Solar**

Solar activity has been moderate.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** June-14-14 4:35 PM

**Subject:** Space Weather Bulletin - 2014-06-14 issued at 20:31 UT (15:31 EST) / Bulletin de météorologie spatiale - 2014-06-14 diffusé à 20:31 TU (15:31 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-06-14 issued at 20:31 UT (15:31 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (20:15 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with active intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### Detailed Information

#### Solar

There are several active regions visible on the solar disk.

#### Interplanetary

The solar wind speed is currently slow (400-500 km/s).

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been active with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** June-15-14 4:44 PM

**Subject:** Space Weather Bulletin - 2014-06-15 issued at 20:39 UT (15:39 EST) / Bulletin de météorologie spatiale - 2014-06-15 diffusé à 20:39 TU (15:39 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-06-15 issued at 20:39 UT (15:39 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (20:15 UT)**

##### **Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **Detailed Information**

##### **Solar**

Solar activity has been moderate.

## Interplanetary

The solar wind speed is currently very slow (< 400 km/s).

## Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Boteler, David [mailto:David.Boteler@NRCan-RNCan.gc.ca]

**Sent:** June-16-14 4:05 PM

**Subject:** Space Weather Bulletin - 2014-06-16 issued at 20:04 UT (15:04 EST) / Bulletin de météorologie spatiale - 2014-06-16 diffusé à 20:04 TU (15:04 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-06-16 issued at 20:04 UT (15:04 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (19:45 UT)

#### Geomagnetic Activity:

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been low.

### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

---

**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** June-17-14 1:36 PM

**Subject:** Space Weather Bulletin - 2014-06-17 issued at 17:35 UT (12:35 EST) / Bulletin de météorologie spatiale - 2014-06-17 diffusé à 17:35 TU (12:35 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-06-17 issued at 17:35 UT (12:35 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (17:15 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been low.

### Interplanetary

Interplanetary activity has been moderate.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** June-18-14 1:20 PM

**Subject:** Space Weather Bulletin - 2014-06-18 issued at 17:19 UT (12:19 EST) / Bulletin de météorologie spatiale - 2014-06-18 diffusé à 17:19 TU (12:19 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-06-18 issued at 17:19 UT (12:19 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (17:00 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: unsettled

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with stormy intervals

auroral zone: unsettled with stormy intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been moderate.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been active with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** June-19-14 1:34 PM

**Subject:** Space Weather Bulletin - 2014-06-19 issued at 17:33 UT (12:33 EST) / Bulletin de météorologie spatiale - 2014-06-19 diffusé à 17:33 TU (12:33 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-06-19 issued at 17:33 UT (12:33 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:15 UT)****Geomagnetic Activity:**

polar cap zone: active

auroral zone: unsettled

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been active with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** June-20-14 1:46 PM

**Subject:** Space Weather Bulletin - 2014-06-20 issued at 17:45 UT (12:45 EST) / Bulletin de météorologie spatiale - 2014-06-20 diffusé à 17:45 TU (12:45 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-06-20 issued at 17:45 UT (12:45 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:30 UT)****Geomagnetic Activity:**

polar cap zone: stormy  
auroral zone: unsettled  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** June-21-14 8:23 AM

**Subject:** Space Weather Bulletin - 2014-06-21 issued at 12:22 UT (07:22 EST) / Bulletin de météorologie spatiale - 2014-06-21 diffusé à 12:22 TU (07:22 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-06-21 issued at 12:22 UT (07:22 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (12:15 UT)****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.  
The solar wind speed is currently slow (400-500 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been active with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** June-22-14 3:53 PM

**Subject:** Space Weather Bulletin - 2014-06-22 issued at 19:52 UT (14:52 EST) / Bulletin de météorologie spatiale - 2014-06-22 diffusé à 19:52 TU (14:52 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-06-22 issued at 19:52 UT (14:52 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (19:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: stormy  
auroral zone: quiet  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals  
auroral zone: quiet  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

Interplanetary activity has been low.  
The solar wind speed is currently slow (400-500 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** June-23-14 2:54 PM

**Subject:** Space Weather Bulletin - 2014-06-23 issued at 18:53 UT (13:53 EST) / Bulletin de météorologie spatiale - 2014-06-23 diffusé à 18:53 TU (13:53 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-06-23 issued at 18:53 UT (13:53 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:45 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|Bz| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** June-24-14 2:04 PM

**Subject:** Space Weather Bulletin - 2014-06-24 issued at 18:02 UT (13:02 EST) / Bulletin de météorologie spatiale - 2014-06-24 diffusé à 18:02 TU (13:02 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-06-24 issued at 18:02 UT (13:02 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** June-25-14 1:45 PM

**Subject:** Space Weather Bulletin - 2014-06-25 issued at 17:44 UT (12:44 EST) / Bulletin de météorologie spatiale - 2014-06-25 diffusé à 17:44 TU (12:44 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-06-25 issued at 17:44 UT (12:44 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** June-26-14 3:26 PM

**Subject:** Space Weather Bulletin - 2014-06-26 issued at 19:25 UT (14:25 EST) / Bulletin de météorologie spatiale - 2014-06-26 diffusé à 19:25 TU (14:25 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-06-26 issued at 19:25 UT (14:25 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (19:15 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been low.

#### Interplanetary

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** June-27-14 1:57 PM

**Subject:** Space Weather Bulletin - 2014-06-27 issued at 17:56 UT (12:56 EST) / Bulletin de météorologie spatiale - 2014-06-27 diffusé à 17:56 TU (12:56 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-06-27 issued at 17:56 UT (12:56 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (17:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

##### **Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** June-28-14 2:47 PM

**Subject:** Space Weather Bulletin - 2014-06-28 issued at 18:46 UT (13:46 EST) / Bulletin de météorologie spatiale - 2014-06-28 diffusé à 18:46 TU (13:46 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-06-28 issued at 18:46 UT (13:46 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (18:30 UT)**

###### **Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been low.

### Interplanetary

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** June-29-14 2:13 PM

**Subject:** Space Weather Bulletin - 2014-06-29 issued at 18:07 UT (13:07 EST) / Bulletin de météorologie spatiale - 2014-06-29 diffusé à 18:07 TU (13:07 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-06-29 issued at 18:07 UT (13:07 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:00 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** June-30-14 2:12 PM

**Subject:** Space Weather Bulletin - 2014-06-30 issued at 18:11 UT (13:11 EST) / Bulletin de météorologie spatiale - 2014-06-30 diffusé à 18:11 TU (13:11 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-06-30 issued at 18:11 UT (13:11 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:00 UT)****Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** July-01-14 2:29 PM

**Subject:** Space Weather Bulletin - 2014-07-01 issued at 18:28 UT (13:28 EST) / Bulletin de météorologie spatiale - 2014-07-01 diffusé à 18:28 TU (13:28 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-01 issued at 18:28 UT (13:28 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)****Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** July-02-14 3:54 PM

**Subject:** Space Weather Bulletin - 2014-07-02 issued at 19:51 UT (14:51 EST) / Bulletin de météorologie spatiale - 2014-07-02 diffusé à 19:51 TU (14:51 HNE)s

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-02 issued at 19:51 UT (14:51 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:45 UT)****Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** July-03-14 2:39 PM

**Subject:** Space Weather Bulletin - 2014-07-03 issued at 18:36 UT (13:36 EST) / Bulletin de météorologie spatiale - 2014-07-03 diffusé à 18:36 TU (13:36 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-03 issued at 18:36 UT (13:36 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: quiet  
sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** July-04-14 2:26 PM

**Subject:** Space Weather Bulletin - 2014-07-04 issued at 18:23 UT (13:23 EST) / Bulletin de météorologie spatiale - 2014-07-04 diffusé à 18:23 TU (13:23 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-04 issued at 18:23 UT (13:23 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

## **Current Conditions (18:15 UT)**

### **Geomagnetic Activity:**

polar cap zone: active  
auroral zone: quiet  
sub-auroral zone: quiet

### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

## **24 Hour Forecast**

### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

### **Possible Impacts on Technology:**

Impacts are not expected.

## **Detailed Information**

### **Solar**

Solar activity has been low.

### **Interplanetary**

Interplanetary activity has been low.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** July-05-14 2:49 PM

**Subject:** Space Weather Bulletin - 2014-07-05 issued at 18:41 UT (13:41 EST) / Bulletin de météorologie spatiale - 2014-07-05 diffusé à 18:41 TU (13:41 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-05 issued at 18:41 UT (13:41 EST)**

## **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** July-06-14 3:55 PM

**Subject:** Space Weather Bulletin - 2014-07-06 issued at 19:53 UT (14:53 EST) / Bulletin de météorologie spatiale - 2014-07-06 diffusé à 19:53 TU (14:53 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-06 issued at 19:53 UT (14:53 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:45 UT)**

**Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** July-07-14 1:53 PM

**Subject:** Space Weather Bulletin - 2014-07-07 issued at 17:51 UT (12:51 EST) / Bulletin de météorologie spatiale - 2014-07-07 diffusé à 17:51 TU (12:51 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-07 issued at 17:51 UT (12:51 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:45 UT)**

**Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** July-08-14 1:43 PM

**Subject:** Space Weather Bulletin - 2014-07-08 issued at 17:41 UT (12:41 EST) / Bulletin de météorologie spatiale - 2014-07-08 diffusé à 17:41 TU (12:41 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-07-08 issued at 17:41 UT (12:41 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: unsettled

sub-auroral zone: unsettled

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.

An M (medium) solar x-ray flare erupted 08 JUL 2014 16:20 UT.

#### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** July-09-14 1:49 PM

**Subject:** Space Weather Bulletin - 2014-07-09 issued at 17:41 UT (12:41 EST) / Bulletin de météorologie spatiale - 2014-07-09 diffusé à 17:41 TU (12:41 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-07-09 issued at 17:41 UT (12:41 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with active intervals

sub-auroral zone: quiet with active intervals

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.

A moderate CME was observed on 08 JUL 2014, and is expected to deliver a glancing blow to the Earth on 10 JUL 2014, resulting in increased geomagnetic activity.

#### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone. Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** July-10-14 1:47 PM

**Subject:** Space Weather Bulletin - 2014-07-10 issued at 17:44 UT (12:44 EST) / Bulletin de météorologie spatiale - 2014-07-10 diffusé à 17:44 TU (12:44 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-10 issued at 17:44 UT (12:44 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:30 UT)**

**Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with active intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

A slow CME was observed on 09 JUL 2014, and is expected to deliver a glancing blow to the Earth on 13 JUL 2014, resulting in increased geomagnetic activity.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sfll-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** July-11-14 1:41 PM

**Subject:** Space Weather Bulletin - 2014-07-11 issued at 17:38 UT (12:38 EST) / Bulletin de météorologie spatiale - 2014-07-11 diffusé à 17:38 TU (12:38 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-07-11 issued at 17:38 UT (12:38 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (17:30 UT)**

##### **Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

##### **Interplanetary**

Interplanetary activity has been low.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** July-12-14 4:05 PM

**Subject:** Space Weather Bulletin - 2014-07-12 issued at 19:53 UT (14:53 EST) / Bulletin de météorologie spatiale - 2014-07-12 diffusé à 19:53 TU (14:53 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-07-12 issued at 19:53 UT (14:53 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (19:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

## Interplanetary

Interplanetary activity has been low.

## Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** July-13-14 2:57 PM

**Subject:** Space Weather Bulletin - 2014-07-13 issued at 18:53 UT (13:53 EST) / Bulletin de météorologie spatiale - 2014-07-13 diffusé à 18:53 TU (13:53 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-07-13 issued at 18:53 UT (13:53 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:45 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with stormy intervals

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

## Solar

Solar activity has been low.

## Interplanetary

Interplanetary activity has been low.

## Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** July-14-14 5:03 PM

**Subject:** Space Weather Bulletin - 2014-07-14 issued at 21:00 UT (16:00 EST) / Bulletin de météorologie spatiale - 2014-07-14 diffusé à 21:00 TU (16:00 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-07-14 issued at 21:00 UT (16:00 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (20:45 UT)

#### Geomagnetic Activity:

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: active with stormy intervals

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been active with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** July-15-14 2:41 PM

**Subject:** Space Weather Bulletin - 2014-07-15 issued at 18:37 UT (13:37 EST) / Bulletin de météorologie spatiale - 2014-07-15 diffusé à 18:37 TU (13:37 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-07-15 issued at 18:37 UT (13:37 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (18:15 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: unsettled

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been active with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** July-16-14 1:39 PM

**Subject:** Space Weather Bulletin - 2014-07-16 issued at 17:34 UT (12:34 EST) / Bulletin de météorologie spatiale - 2014-07-16 diffusé à 17:34 TU (12:34 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-16 issued at 17:34 UT (12:34 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:15 UT)****Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with active intervals  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (~ 400 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** July-17-14 1:57 PM

**Subject:** Space Weather Bulletin - 2014-07-17 issued at 17:55 UT (12:55 EST) / Bulletin de météorologie spatiale - 2014-07-17 diffusé à 17:55 TU (12:55 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-17 issued at 17:55 UT (12:55 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:45 UT)**

**Geomagnetic Activity:**

polar cap zone: active  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

##### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** July-18-14 2:21 PM

**Subject:** Space Weather Bulletin - 2014-07-18 issued at 18:18 UT (13:18 EST) / Bulletin de météorologie spatiale - 2014-07-18 diffusé à 18:18 TU (13:18 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-07-18 issued at 18:18 UT (13:18 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (18:00 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** July-19-14 4:33 PM

**Subject:** Space Weather Bulletin - 2014-07-19 issued at 20:28 UT (15:28 EST) / Bulletin de météorologie spatiale - 2014-07-19 diffusé à 20:28 TU (15:28 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-19 issued at 20:28 UT (15:28 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been very low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** July-20-14 4:34 PM

**Subject:** Space Weather Bulletin - 2014-07-20 issued at 20:29 UT (15:29 EST) / Bulletin de météorologie spatiale - 2014-07-20 diffusé à 20:29 TU (15:29 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-20 issued at 20:29 UT (15:29 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (20:15 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: quiet  
sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: quiet  
sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

##### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** July-21-14 3:59 PM

**Subject:** Space Weather Bulletin - 2014-07-21 issued at 19:56 UT (14:56 EST) / Bulletin de météorologie spatiale - 2014-07-21 diffusé à 19:56 TU (14:56 HNE)

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**Space Weather Bulletin - 2014-07-21 issued at 19:56 UT (14:56 EST)**

## Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

## Current Conditions (19:45 UT)

### Geomagnetic Activity:

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

## 24 Hour Forecast

### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

## Detailed Information

### Solar

Solar activity has been low.

### Interplanetary

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** July-22-14 1:24 PM

**Subject:** Space Weather Bulletin - 2014-07-22 issued at 17:22 UT (12:22 EST) / Bulletin de météorologie spatiale - 2014-07-22 diffusé à 17:22 TU (12:22 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-07-22 issued at 17:22 UT (12:22 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:00 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|Bz| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** July-23-14 2:46 PM

**Subject:** Space Weather Bulletin - 2014-07-23 issued at 18:45 UT (13:45 EST) / Bulletin de météorologie spatiale - 2014-07-23 diffusé à 18:45 TU (13:45 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-07-23 issued at 18:45 UT (13:45 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:15 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### Detailed Information

#### Solar

Solar activity has been low.

Two small coronal holes are located near the centre of the solar disk.

#### Interplanetary

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** July-24-14 1:46 PM

**Subject:** Space Weather Bulletin - 2014-07-24 issued at 17:43 UT (12:43 EST) / Bulletin de météorologie spatiale - 2014-07-24 diffusé à 17:43 TU (12:43 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-24 issued at 17:43 UT (12:43 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:30 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information**

**Solar**

Solar activity has been low.

Two small coronal holes are located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** July-25-14 3:37 PM

**Subject:** Space Weather Bulletin - 2014-07-25 issued at 19:36 UT (14:36 EST) / Bulletin de météorologie spatiale - 2014-07-25 diffusé à 19:36 TU (14:36 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-07-25 issued at 19:36 UT (14:36 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (19:15 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

One small coronal hole is located near the centre of the solar disk.

##### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** July-26-14 3:34 PM

**Subject:** Space Weather Bulletin - 2014-07-26 issued at 19:31 UT (14:31 EST) / Bulletin de météorologie spatiale - 2014-07-26 diffusé à 19:31 TU (14:31 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-07-26 issued at 19:31 UT (14:31 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (19:15 UT)**

###### **Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

###### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

## Detailed Information

### Solar

Solar activity has been low.  
One small coronal hole is located near the centre of the solar disk.

### Interplanetary

The solar wind speed is currently very slow (< 400 km/s).  
The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** July-27-14 4:27 PM

**Subject:** Space Weather Bulletin - 2014-07-27 issued at 20:25 UT (15:25 EST) / Bulletin de météorologie spatiale - 2014-07-27 diffusé à 20:25 TU (15:25 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-07-27 issued at 20:25 UT (15:25 EST)

### Summary

There is currently no major storm watch in effect.  
See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (20:15 UT)

#### Geomagnetic Activity:

polar cap zone: stormy  
auroral zone: quiet  
sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.  
Directional Drilling: Potential for significant deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with stormy intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** July-28-14 1:35 PM

**Subject:** Space Weather Bulletin - 2014-07-28 issued at 17:34 UT (12:34 EST) / Bulletin de météorologie spatiale - 2014-07-28 diffusé à 17:34 TU (12:34 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-28 issued at 17:34 UT (12:34 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:15 UT)****Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: unsettled

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: active with stormy intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.  
Directional Drilling: Potential for significant deviations in the polar cap zone.

**Detailed Information****Solar**

Solar activity has been very low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** July-29-14 3:02 PM

**Subject:** Space Weather Bulletin - 2014-07-29 issued at 19:00 UT (14:00 EST) / Bulletin de météorologie spatiale - 2014-07-29 diffusé à 19:00 TU (14:00 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-29 issued at 19:00 UT (14:00 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:45 UT)****Geomagnetic Activity:**

polar cap zone: active  
auroral zone: quiet  
sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed has been decreasing over the last hour (currently ~ 300 km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** July-30-14 3:23 PM

**Subject:** Space Weather Bulletin - 2014-07-30 issued at 19:22 UT (14:22 EST) / Bulletin de météorologie spatiale - 2014-07-30 diffusé à 19:22 TU (14:22 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-30 issued at 19:22 UT (14:22 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:15 UT)****Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** July-31-14 4:02 PM

**Subject:** Space Weather Bulletin - 2014-07-31 issued at 20:01 UT (15:01 EST) / Bulletin de météorologie spatiale - 2014-07-31 diffusé à 20:01 TU (15:01 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-07-31 issued at 20:01 UT (15:01 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:45 UT)****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with stormy intervals

sub-auroral zone: quiet with stormy intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been moderate.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** August-01-14 2:41 PM

**Subject:** Space Weather Bulletin - 2014-08-01 issued at 18:37 UT (13:37 EST) / Bulletin de météorologie spatiale - 2014-08-01 diffusé à 18:37 TU (13:37 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-01 issued at 18:37 UT (13:37 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)**

**Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.  
Two small coronal holes are located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been moderate.  
The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** August-02-14 4:21 PM

**Subject:** Space Weather Bulletin - 2014-08-02 issued at 20:20 UT (15:20 EST) / Bulletin de météorologie spatiale - 2014-08-02 diffusé à 20:20 TU (15:20 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-02 issued at 20:20 UT (15:20 EST)**

**Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 02 Aug 2014 to 03 Aug 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (20:00 UT)**

#### **Geomagnetic Activity:**

polar cap zone: stormy  
auroral zone: quiet  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: active with stormy intervals  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet with unsettled intervals

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.  
Two small coronal holes are located near the centre of the solar disk.

#### **Interplanetary**

Interplanetary activity has been moderate.  
Moderate solar wind speeds are due to high speed streams from coronal holes.  
The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been active with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** August-03-14 6:00 PM

**Subject:** Space Weather Bulletin - 2014-08-03 issued at 21:59 UT (16:59 EST) / Bulletin de météorologie spatiale - 2014-08-03 diffusé à 21:59 TU (16:59 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-08-03 issued at 21:59 UT (16:59 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (21:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: active

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: active with stormy intervals

auroral zone: quiet with stormy intervals

sub-auroral zone: quiet with stormy intervals

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** August-04-14 3:22 PM

**Subject:** Space Weather Bulletin - 2014-08-04 issued at 19:21 UT (14:21 EST) / Bulletin de météorologie spatiale - 2014-08-04 diffusé à 19:21 TU (14:21 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-08-04 issued at 19:21 UT (14:21 EST)

### Summary

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 04 Aug 2014 to 05 Aug 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (19:00 UT)

#### Geomagnetic Activity:

polar cap zone: stormy

auroral zone: unsettled

sub-auroral zone: unsettled

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: active with stormy intervals

auroral zone: active with stormy intervals

sub-auroral zone: quiet with stormy intervals

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been low.

#### Interplanetary

Interplanetary activity has been low.

Moderate solar wind speeds are due to high speed streams from coronal holes.

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** August-05-14 4:20 PM

**Subject:** Space Weather Bulletin - 2014-08-05 issued at 20:15 UT (15:15 EST) / Bulletin de météorologie spatiale - 2014-08-05 diffusé à 20:15 TU (15:15 HNE)

La version française du bulletin suit.

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### Space Weather Bulletin - 2014-08-05 issued at 20:15 UT (15:15 EST)

#### Summary

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 05 Aug 2014 to 06 Aug 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### Current Conditions (20:00 UT)

##### Geomagnetic Activity:

polar cap zone: active

auroral zone: unsettled

sub-auroral zone: unsettled

##### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

##### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### 24 Hour Forecast

##### Geomagnetic Activity:

polar cap zone: unsettled with stormy intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

##### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: moderate

##### Possible Impacts on Technology:

Impacts are not expected.

#### Detailed Information

##### Solar

Solar activity has been low.

One small coronal hole is located near the centre of the solar disk.

##### Interplanetary

Interplanetary activity has been moderate.

Moderate solar wind speeds are due to high speed streams from coronal holes.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** August-06-14 5:34 PM

**Subject:** Space Weather Bulletin - 2014-08-06 issued at 21:33 UT (16:33 EST) / Bulletin de météorologie spatiale - 2014-08-06 diffusé à 21:33 TU (16:33 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-08-06 issued at 21:33 UT (16:33 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (21:15 UT)**

###### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

Moderate solar wind speeds are due to high speed streams from coronal holes.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** August-07-14 9:59 PM

**Subject:** Space Weather Bulletin - 2014-08-08 issued at 01:58 UT (20:58 EST) / Bulletin de météorologie spatiale - 2014-08-08 diffusé à 01:58 TU (20:58 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-08 issued at 01:58 UT (20:58 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (01:45 UT)****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been very low.

##### **Interplanetary**

Interplanetary activity has been low.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** August-08-14 2:12 PM

**Subject:** Space Weather Bulletin - 2014-08-08 issued at 18:12 UT (13:12 EST) / Bulletin de météorologie spatiale - 2014-08-08 diffusé à 18:12 TU (13:12 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-08-08 issued at 18:12 UT (13:12 EST)**

##### **Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 08 Aug 2014 to 09 Aug 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (18:00 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

##### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

One small coronal hole is located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

Moderate solar wind speeds are due to high speed streams from coronal holes.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** August-09-14 2:52 PM

**Subject:** Space Weather Bulletin - 2014-08-09 issued at 18:47 UT (13:47 EST) / Bulletin de météorologie spatiale - 2014-08-09 diffusé à 18:47 TU (13:47 HNE)

française du bulletin suit.

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**Space Weather Bulletin - 2014-08-09 issued at 18:47 UT (13:47 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** August-10-14 5:34 PM

**Subject:** Space Weather Bulletin - 2014-08-10 issued at 21:32 UT (16:32 EST) / Bulletin de météorologie spatiale - 2014-08-10 diffusé à 21:32 TU (16:32 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-10 issued at 21:32 UT (16:32 EST)****Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 10 Aug 2014 to 11 Aug 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:15 UT)****Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: active with stormy intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

One small coronal hole is located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

Moderate solar wind speeds are due to high speed streams from coronal holes.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** August-11-14 2:13 PM

**Subject:** Space Weather Bulletin - 2014-08-11 issued at 18:12 UT (13:12 EST) / Bulletin de météorologie spatiale - 2014-08-11 diffusé à 18:12 TU (13:12 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-11 issued at 18:12 UT (13:12 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:00 UT)****Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** August-12-14 2:07 PM

**Subject:** Space Weather Bulletin - 2014-08-12 issued at 18:05 UT (13:05 EST) / Bulletin de météorologie spatiale - 2014-08-12 diffusé à 18:05 TU (13:05 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-12 issued at 18:05 UT (13:05 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:45 UT)**

**Geomagnetic Activity:**

polar cap zone: active  
auroral zone: quiet  
sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** August-13-14 2:26 PM

**Subject:** Space Weather Bulletin - 2014-08-13 issued at 18:24 UT (13:24 EST) / Bulletin de météorologie spatiale - 2014-08-13 diffusé à 18:24 TU (13:24 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-13 issued at 18:24 UT (13:24 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:15 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active  
auroral zone: quiet  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** August-14-14 2:11 PM

**Subject:** Space Weather Bulletin - 2014-08-14 issued at 18:09 UT (13:09 EST) / Bulletin de météorologie spatiale - 2014-08-14 diffusé à 18:09 TU (13:09 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-14 issued at 18:09 UT (13:09 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:00 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** August-15-14 1:47 PM

**Subject:** Space Weather Bulletin - 2014-08-15 issued at 17:42 UT (12:42 EST) / Bulletin de météorologie spatiale - 2014-08-15 diffusé à 17:42 TU (12:42 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-15 issued at 17:42 UT (12:42 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** August-16-14 2:59 PM

**Subject:** Space Weather Bulletin - 2014-08-16 issued at 18:56 UT (13:56 EST) / Bulletin de météorologie spatiale - 2014-08-16 diffusé à 18:56 TU (13:56 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-16 issued at 18:56 UT (13:56 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:45 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** August-17-14 3:23 PM

**Subject:** Space Weather Bulletin - 2014-08-17 issued at 19:20 UT (14:20 EST) / Bulletin de météorologie spatiale - 2014-08-17 diffusé à 19:20 TU (14:20 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-08-17 issued at 19:20 UT (14:20 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (19:15 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

A slow CME was observed on 15 AUG 2014, and is expected to deliver a glancing blow to the Earth on 19 AUG 2014, resulting in increased geomagnetic activity.

#### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** August-18-14 1:30 PM

**Subject:** Space Weather Bulletin - 2014-08-18 issued at 17:23 UT (12:23 EST) / Bulletin de météorologie spatiale - 2014-08-18 diffusé à 17:23 TU (12:23 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-08-18 issued at 17:23 UT (12:23 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (17:15 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been low.

A slow CME was observed on 15 AUG 2014, and is expected to deliver a glancing blow to the Earth on 19 AUG 2014, resulting in increased geomagnetic activity.

#### Interplanetary

Interplanetary activity has been low.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** August-19-14 1:33 PM

**Subject:** Space Weather Bulletin - 2014-08-19 issued at 17:27 UT (12:27 EST) / Bulletin de météorologie spatiale - 2014-08-19 diffusé à 17:27 TU (12:27 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-19 issued at 17:27 UT (12:27 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:15 UT)**

**Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

An interplanetary shock has been observed on 19 AUG 2014 06:00 UT.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** August-20-14 3:31 PM

**Subject:** Space Weather Bulletin - 2014-08-20 issued at 19:29 UT (14:29 EST) / Bulletin de météorologie spatiale - 2014-08-20 diffusé à 19:29 TU (14:29 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-08-20 issued at 19:29 UT (14:29 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (19:15 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been low.

#### Interplanetary

Interplanetary activity has been low.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** August-21-14 1:55 PM

**Subject:** Space Weather Bulletin - 2014-08-21 issued at 17:52 UT (12:52 EST) / Bulletin de météorologie spatiale - 2014-08-21 diffusé à 17:52 TU (12:52 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-08-21 issued at 17:52 UT (12:52 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (17:30 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: unsettled

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been moderate.

An M (medium) solar x-ray flare erupted 21 AUG 2014 13:25 UT.

##### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** August-22-14 4:23 PM

**Subject:** Space Weather Bulletin - 2014-08-22 issued at 20:17 UT (15:17 EST) / Bulletin de météorologie spatiale - 2014-08-22 diffusé à 20:17 TU (15:17 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-08-22 issued at 20:17 UT (15:17 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (20:00 UT)**

###### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **Detailed Information**

###### **Solar**

Solar activity has been moderate.

An M (medium) solar x-ray flare erupted 22 AUG 2014 06:24 UT.

### **Interplanetary**

Interplanetary activity has been low.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** August-23-14 2:38 PM

**Subject:** Space Weather Bulletin - 2014-08-23 issued at 18:35 UT (13:35 EST) / Bulletin de météorologie spatiale - 2014-08-23 diffusé à 18:35 TU (13:35 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-08-23 issued at 18:35 UT (13:35 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (18:15 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been moderate.

##### **Interplanetary**

Interplanetary activity has been low.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** August-24-14 3:26 PM

**Subject:** Space Weather Bulletin - 2014-08-24 issued at 19:22 UT (14:22 EST) / Bulletin de météorologie spatiale - 2014-08-24 diffusé à 19:22 TU (14:22 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-08-24 issued at 19:22 UT (14:22 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (19:15 UT)**

###### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been moderate.

An M (medium) solar x-ray flare erupted 24 AUG 2014 12:00 UT.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** August-25-14 1:44 PM

**Subject:** Space Weather Bulletin - 2014-08-25 issued at 17:40 UT (12:40 EST) / Bulletin de météorologie spatiale - 2014-08-25 diffusé à 17:40 TU (12:40 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-25 issued at 17:40 UT (12:40 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:30 UT)****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been moderate.

An M (medium) solar x-ray flare erupted 25 AUG 2014 15:00 UT.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** August-26-14 2:21 PM

**Subject:** Space Weather Bulletin - 2014-08-26 issued at 18:19 UT (13:19 EST) / Bulletin de météorologie spatiale - 2014-08-26 diffusé à 18:19 TU (13:19 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-26 issued at 18:19 UT (13:19 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:00 UT)****Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Two slow non-Earth-directed CMEs erupted on 25 Aug 2014 at 15:00 UT and 20:15 UT.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|Bz| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** August-27-14 1:32 PM

**Subject:** Space Weather Bulletin - 2014-08-27 issued at 17:31 UT (12:31 EST) / Bulletin de météorologie spatiale - 2014-08-27 diffusé à 17:31 TU (12:31 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-27 issued at 17:31 UT (12:31 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:15 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: active

sub-auroral zone: active

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral and sub-auroral zones.

Directional Drilling: Potential for deviations in the auroral and sub-auroral zones.

## 24 Hour Forecast

### Geomagnetic Activity:

polar cap zone: active with stormy intervals  
auroral zone: active with stormy intervals  
sub-auroral zone: unsettled with stormy intervals

### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap, auroral, and sub-auroral zones.  
Directional Drilling: Potential for deviations in the polar cap, auroral, and sub-auroral zones.

## Detailed Information

### Solar

Solar activity has been low.

### Interplanetary

Interplanetary activity has been moderate.  
The solar wind speed is currently very slow (< 400 km/s).  
The interplanetary magnetic field has been primarily negative at moderate ( $|B_z| < 10$  nT) levels.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and unsettled with stormy intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** August-28-14 3:02 PM

**Subject:** Space Weather Bulletin - 2014-08-28 issued at 19:01 UT (14:01 EST) / Bulletin de météorologie spatiale - 2014-08-28 diffusé à 19:01 TU (14:01 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-08-28 issued at 19:01 UT (14:01 EST)

### Summary

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions due to solar activity are currently observed in the polar cap and auroral zones.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:45 UT)

**Geomagnetic Activity:**

polar cap zone: active  
auroral zone: active  
sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.  
Directional Drilling: Potential for deviations in the polar cap and auroral zones.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled with active intervals  
auroral zone: active with stormy intervals  
sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.  
Directional Drilling: Potential for deviations in the auroral zone.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been high.  
The solar wind speed is currently very slow (< 400 km/s).  
The interplanetary magnetic field has been fluctuating at high ( $|B_z| < 20$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, active with stormy intervals in the auroral zone, and unsettled with stormy intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, active with stormy intervals in the auroral zone, and unsettled in the sub-auroral zone.  
Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** August-29-14 2:22 PM

**Subject:** Space Weather Bulletin - 2014-08-29 issued at 18:21 UT (13:21 EST) / Bulletin de météorologie spatiale - 2014-08-29 diffusé à 18:21 TU (13:21 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-08-29 issued at 18:21 UT (13:21 EST)

### Summary

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions due to solar activity are currently observed in the polar cap zone.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:00 UT)

#### Geomagnetic Activity:

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with stormy intervals

auroral zone: active

sub-auroral zone: unsettled

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: moderate

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

### Detailed Information

#### Solar

Solar activity has been low.

One medium coronal hole elongated in longitude is located near the centre of the solar disk.

#### Interplanetary

Interplanetary activity has been moderate.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, active in the auroral zone, and unsettled in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** August-30-14 2:41 PM

**Subject:** Space Weather Bulletin - 2014-08-30 issued at 18:40 UT (13:40 EST) / Bulletin de météorologie spatiale - 2014-08-30 diffusé à 18:40 TU (13:40 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-08-30 issued at 18:40 UT (13:40 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: unsettled

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** August-31-14 1:15 PM

**Subject:** Space Weather Bulletin - 2014-08-31 issued at 17:14 UT (12:14 EST) / Bulletin de météorologie spatiale - 2014-08-31 diffusé à 17:14 TU (12:14 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-08-31 issued at 17:14 UT (12:14 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:00 UT)**

**Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been moderate.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** September-01-14 3:31 PM

**Subject:** Space Weather Bulletin - 2014-09-01 issued at 19:30 UT (14:30 EST) / Bulletin de météorologie spatiale - 2014-09-01 diffusé à 19:30 TU (14:30 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-09-01 issued at 19:30 UT (14:30 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (19:15 UT)**

###### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

###### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

A fast non-Earth-directed CME erupted on 1 Sep 2014 11:00 UT.

#### **Interplanetary**

Interplanetary activity has been moderate.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** September-02-14 2:11 PM

**Subject:** Space Weather Bulletin - 2014-09-02 issued at 18:07 UT (13:07 EST) / Bulletin de météorologie spatiale - 2014-09-02 diffusé à 18:07 TU (13:07 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-09-02 issued at 18:07 UT (13:07 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (17:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: unsettled

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been moderate.

Several non-Earth-directed CMEs erupted on 01 Sep 2014 at 11:00 UT, 16:00 UT, and 22:00 UT.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** September-03-14 1:59 PM

**Subject:** Space Weather Bulletin - 2014-09-03 issued at 17:58 UT (12:58 EST) / Bulletin de météorologie spatiale - 2014-09-03 diffusé à 17:58 TU (12:58 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-09-03 issued at 17:58 UT (12:58 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:45 UT)**

**Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** September-04-14 1:31 PM

**Subject:** Space Weather Bulletin - 2014-09-04 issued at 17:30 UT (12:30 EST) / Bulletin de météorologie spatiale - 2014-09-04 diffusé à 17:30 TU (12:30 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-09-04 issued at 17:30 UT (12:30 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:15 UT)**

**Geomagnetic Activity:**

polar cap zone: stormy  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.  
The solar wind speed is currently slow (400-500 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** September-05-14 1:43 PM

**Subject:** Space Weather Bulletin - 2014-09-05 issued at 17:41 UT (12:41 EST) / Bulletin de météorologie spatiale - 2014-09-05 diffusé à 17:41 TU (12:41 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-09-05 issued at 17:41 UT (12:41 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (17:30 UT)

#### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: unsettled

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: moderate

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been low.

#### Interplanetary

Interplanetary activity has been low.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** September-06-14 2:00 PM

**Subject:** Space Weather Bulletin - 2014-09-06 issued at 17:59 UT (12:59 EST) / Bulletin de météorologie spatiale - 2014-09-06 diffusé à 17:59 TU (12:59 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-09-06 issued at 17:59 UT (12:59 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (17:45 UT)

#### Geomagnetic Activity:

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: unsettled

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with stormy intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been low.

#### Interplanetary

Interplanetary activity has been moderate.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** September-07-14 1:43 PM

**Subject:** Space Weather Bulletin - 2014-09-07 issued at 17:42 UT (12:42 EST) / Bulletin de météorologie spatiale - 2014-09-07 diffusé à 17:42 TU (12:42 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-09-07 issued at 17:42 UT (12:42 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (17:30 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been low.

#### Interplanetary

Interplanetary activity has been moderate.

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Danskin, Donald [mailto:Donald.Danskin@NRCan-RNCan.gc.ca]

**Sent:** September-08-14 1:41 PM

**Subject:** Space Weather Bulletin - 2014-09-08 issued at 17:40 UT (12:40 EST) / Bulletin de météorologie spatiale - 2014-09-08 diffusé à 17:40 TU (12:40 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-09-08 issued at 17:40 UT (12:40 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

Interplanetary activity has been low.

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** September-09-14 3:30 PM

**Subject:** Space Weather Bulletin - 2014-09-09 issued at 19:28 UT (14:28 EST) / Bulletin de météorologie spatiale - 2014-09-09 diffusé à 19:28 TU (14:28 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-09-09 issued at 19:28 UT (14:28 EST)**

**Summary**

There is currently no major storm watch in effect.

A CME was observed on 09 SEP 2014, and is expected to deliver a glancing blow to the Earth on 11-12 SEP 2014, resulting in disturbed geomagnetic activity.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:00 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with stormy intervals

auroral zone: quiet with stormy intervals

sub-auroral zone: quiet with stormy intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Power Systems: possibility of weak voltage fluctuations in the polar cap, auroral, and sub-auroral zones.

Aeromagnetic surveys: Potential for significant disruptions in the polar cap, auroral, and sub-auroral zones.

Directional Drilling: Potential for significant deviations in the polar cap, auroral, and sub-auroral zones.

**Detailed Information**

**Solar**

Solar activity has been moderate.

A CME was observed on 09 SEP 2014, and is expected to deliver a glancing blow to the Earth on 11-12 SEP 2014, resulting in disturbed geomagnetic activity.

One coronal hole is located near the edge of the solar disk.

Two coronal holes are located near the centre of the solar disk.

A long duration M (medium) solar x-ray flare erupted at 09 SEP 2014 00:30 UT near the edge of the solar disk.

### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** September-10-14 1:41 PM

**Subject:** Space Weather Bulletin - 2014-09-10 issued at 17:08 UT (12:08 EST) / Bulletin de météorologie spatiale - 2014-09-10 diffusé à 17:08 TU (12:08 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-09-10 issued at 17:08 UT (12:08 EST)**

#### **Summary**

There is currently no major storm watch in effect.

A CME was observed on 09 SEP 2014, and is expected to deliver a glancing blow to the Earth on 11-12 SEP 2014, resulting in disturbed geomagnetic activity.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (16:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information**

**Solar**

Solar activity has been low.

A CME was observed on 09 SEP 2014, and is expected to deliver a glancing blow to the Earth on 11-12 SEP 2014, resulting in disturbed geomagnetic activity.

A long duration M (medium) solar x-ray flare erupted at 09 SEP 2014 00:30 UT near the edge of the solar disk.

One coronal hole is located near the centre of the solar disk.

Two coronal holes are located near the edge of the solar disk.

**Interplanetary**

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

The solar wind speed is currently very slow ( $< 400$  km/s).

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** September-11-14 12:58 PM

**Subject:** Space Weather Bulletin - 2014-09-11 issued at 16:55 UT (11:55 EST) / Bulletin de météorologie spatiale - 2014-09-11 diffusé à 16:55 TU (11:55 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-09-11 issued at 16:55 UT (11:55 EST)**

**Summary**

There is currently no major storm watch in effect.

A large long duration solar x-ray flare has erupted over the past 24 hours.

A CME was observed on 09 SEP 2014, and is expected to deliver a glancing blow to the Earth on 11-12 SEP 2014, resulting in increased geomagnetic activity.

An Earth-directed CME erupted on 10 SEP 2014 18:00 UT and is expected to reach the Earth on 12 SEP 2014, resulting in increased geomagnetic activity.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

## **Current Conditions (16:30 UT)**

### **Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: quiet  
sub-auroral zone: quiet

### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

## **24 Hour Forecast**

### **Geomagnetic Activity:**

polar cap zone: active with stormy intervals  
auroral zone: unsettled with stormy intervals  
sub-auroral zone: unsettled with stormy intervals

### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

### **Possible Impacts on Technology:**

Power Systems: possibility of weak voltage fluctuations in the polar cap, auroral, and sub-auroral zones.  
Aeromagnetic surveys: Potential for significant disruptions in the polar cap, auroral, and sub-auroral zones.  
Directional Drilling: Potential for significant deviations in the polar cap, auroral, and sub-auroral zones.  
HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

## **Detailed Information**

### **Solar**

Solar activity has been high.

The active region located near the central region of the solar disk has produced long duration solar x-ray flares and associated CMEs and has the potential to produce subsequent solar eruptions.

An Earth-directed CME erupted on 10 SEP 2014 18:00 UT and is expected to reach the Earth on 12 SEP 2014, resulting in increased geomagnetic activity.

A CME was observed on 09 SEP 2014, and is expected to deliver a glancing blow to the Earth on 11-12 SEP 2014, resulting in increased geomagnetic activity.

A long duration M (medium) solar x-ray flare erupted at 10 SEP 2014 00:30 UT near the edge of the solar disk.

A long duration X (large) solar x-ray flare erupted at 10 SEP 2014 17:45 UT near the centre of the solar disk.

An M (medium) solar x-ray flare erupted 11 SEP 2014 15:26 UT near the centre of the solar disk.

### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field currently has  $B_z = -2$  nT.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and unsettled with stormy intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** September-12-14 1:02 PM

**Subject:** Space Weather Bulletin - 2014-09-12 issued at 16:58 UT (11:58 EST) / Bulletin de météorologie spatiale - 2014-09-12 diffusé à 16:58 TU (11:58 HNE)

La version française du bulletin suit.

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### Space Weather Bulletin - 2014-09-12 issued at 16:58 UT (11:58 EST)

#### Summary

A major storm WATCH is in effect for the polar cap, auroral, and sub-auroral zones from 12 SEP 2014 16:02 UT to 12 SEP 2014 18:17 UT.

Major storm conditions are currently observed in the polar cap and auroral zones.

Stormy conditions are currently observed in the sub-auroral zone.

A polar cap absorption event is possible.

An Earth-directed CME erupted on 10 SEP 2014 18:00 UT, resulting in increased geomagnetic activity.

Possibility of impacts to power systems, radio systems, aeromagnetic surveys, and directional drilling.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### Current Conditions (16:30 UT)

##### Geomagnetic Activity:

polar cap zone: major storm

auroral zone: stormy

sub-auroral zone: stormy

##### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

##### Possible Impacts on Technology:

Power Systems: geomagnetic induced currents may cause misoperation of protective relays and transformer heating in the polar cap zone.

Power Systems: possibility of weak voltage fluctuations in the auroral and sub-auroral zones.

HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

Aeromagnetic surveys: Potential for severe disruptions in the polar cap zone.

Aeromagnetic surveys: Potential for significant disruptions in the auroral and sub-auroral zones.

Directional Drilling: Potential for severe deviations in the polar cap zone.

Directional Drilling: Potential for significant deviations in the auroral and sub-auroral zones.

#### 24 Hour Forecast

##### Geomagnetic Activity:

polar cap zone: active intervals

auroral zone: active intervals

sub-auroral zone: unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

**Detailed Information****Solar**

Solar activity has been moderate.

The active region located near the central region of the solar disk has produced solar x-ray flares and associated CMEs and has the potential to produce subsequent solar eruptions.

An Earth-directed CME erupted on 10 SEP 2014 18:00 UT, resulting in increased geomagnetic activity.

A long duration X (large) solar x-ray flare erupted at 10 SEP 2012 17:25 UT near the centre of the solar disk.

Two medium solar x-ray flares have erupted over the past 24 hours.

**Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).

Moderate solar wind speeds are due to a CME observed at 10 SEP 2014 18:00 UT.

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and unsettled with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be active interval in the polar zone, active interval in the auroral zone, and unsettled interval in the sub-auroral zone.

A geomagnetic sudden impulse due to a shock in the solar wind was observed on 12 SEP 2014 15:55 UT.

Enhanced geomagnetic activity is likely associated with the arrival of a CME that erupted 10 SEP 2014 18:00 UT and reached the Earth at 10 SEP 2014 15:55 UT.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** September-13-14 2:18 PM

**Subject:** Space Weather Bulletin - 2014-09-13 issued at 18:17 UT (13:17 EST) / Bulletin de météorologie spatiale - 2014-09-13 diffusé à 18:17 TU (13:17 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-09-13 issued at 18:17 UT (13:17 EST)****Summary**

There is currently no major storm watch in effect.

The major storm WATCH issued 12 SEP 2014 16:02 UT for the polar cap, auroral, and sub-auroral zones ended 12 SEP 2014 18:17 UT.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:00 UT)**

#### **Geomagnetic Activity:**

polar cap zone: stormy  
auroral zone: quiet  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Power Systems: possibility of weak voltage fluctuations in the polar cap zone.  
Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.  
Directional Drilling: Potential for significant deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: active with stormy intervals  
auroral zone: unsettled with active intervals  
sub-auroral zone: unsettled

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

#### **Possible Impacts on Technology:**

Power Systems: possibility of weak voltage fluctuations in the polar cap zone.  
Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.  
Aeromagnetic surveys: Potential for disruptions in the auroral zone.  
Directional Drilling: Potential for significant deviations in the polar cap zone.  
Directional Drilling: Potential for deviations in the auroral zone.  
Geostationary satellites: moderate risk of internal charging.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.  
A non-Earth-directed CME erupted on 12 SEP 2014 18:36 UT.  
One coronal hole is located near the edge of the solar disk.

#### **Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).  
Moderate solar wind speeds are due to a CME observed at 10 SEP 2014 18:00 UT.  
The interplanetary magnetic field has been primarily positive at high ( $|B_z| < 20$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been active with major storm intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be active with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and unsettled in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** September-14-14 2:07 PM

**Subject:** Space Weather Bulletin - 2014-09-14 issued at 18:05 UT (13:05 EST) / Bulletin de météorologie spatiale - 2014-09-14 diffusé à 18:05 TU (13:05 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-09-14 issued at 18:05 UT (13:05 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Power Systems: possibility of weak voltage fluctuations in the polar cap zone.

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Power Systems: possibility of weak voltage fluctuations in the polar cap zone.

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.

A non-Earth-directed CME erupted on 14 SEP 2014 02:48 UT.

An M (medium) solar x-ray flare erupted 14 SEP 2014 02:09 UT near the edge of the solar disk.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been primarily positive at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** September-15-14 12:54 PM

**Subject:** Space Weather Bulletin - 2014-09-15 issued at 16:52 UT (11:52 EST) / Bulletin de météorologie spatiale - 2014-09-15 diffusé à 16:52 TU (11:52 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-09-15 issued at 16:52 UT (11:52 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (16:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

One coronal hole is located near the centre of the solar disk.

##### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** September-16-14 1:11 PM

**Subject:** Space Weather Bulletin - 2014-09-16 issued at 17:09 UT (12:09 EST) / Bulletin de météorologie spatiale - 2014-09-16 diffusé à 17:09 TU (12:09 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-09-16 issued at 17:09 UT (12:09 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (16:45 UT)**

###### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **Detailed Information**

###### **Solar**

Solar activity has been low.  
A slow non-Earth-directed CME erupted on 15 SEP 2014.  
One coronal hole is located near the centre of the solar disk.

### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** September-17-14 1:07 PM

**Subject:** Space Weather Bulletin - 2014-09-17 issued at 17:06 UT (12:06 EST) / Bulletin de météorologie spatiale - 2014-09-17 diffusé à 17:06 TU (12:06 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-09-17 issued at 17:06 UT (12:06 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (16:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

One coronal hole is located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been primarily positive at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** September-18-14 1:06 PM

**Subject:** Space Weather Bulletin - 2014-09-18 issued at 17:04 UT (12:04 EST) / Bulletin de météorologie spatiale - 2014-09-18 diffusé à 17:04 TU (12:04 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-09-18 issued at 17:04 UT (12:04 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (16:45 UT)****Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been moderate.

An M (medium) solar x-ray flare erupted 18 SEP 2014 08:41 UT.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|Bz| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** September-19-14 1:29 PM

**Subject:** Space Weather Bulletin - 2014-09-19 issued at 17:28 UT (12:28 EST) / Bulletin de météorologie spatiale - 2014-09-19 diffusé à 17:28 TU (12:28 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-09-19 issued at 17:28 UT (12:28 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:15 UT)**

**Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: active

sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Power Systems: possibility of weak voltage fluctuations in the polar cap zone.

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: unsettled with active intervals

sub-auroral zone: unsettled

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Power Systems: possibility of weak voltage fluctuations in the polar cap zone.

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

Directional Drilling: Potential for deviations in the auroral zone.

#### **Detailed Information**

##### **Solar**

One coronal hole is located near the centre of the solar disk.

One coronal hole is located near the edge of the solar disk.

##### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|Bz| < 10$  nT) levels.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and unsettled in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** September-20-14 1:49 PM

**Subject:** Space Weather Bulletin - 2014-09-20 issued at 17:48 UT (12:48 EST) / Bulletin de météorologie spatiale - 2014-09-20 diffusé à 17:48 TU (12:48 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-09-20 issued at 17:48 UT (12:48 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active  
auroral zone: unsettled  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

#### **Possible Impacts on Technology:**

Power Systems: possibility of weak voltage fluctuations in the polar cap zone.  
Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.  
Directional Drilling: Potential for significant deviations in the polar cap zone.

### **Detailed Information**

#### **Solar**

Solar activity has been low.  
Three coronal holes are located near the centre of the solar disk.

#### **Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** September-21-14 2:13 PM

**Subject:** Space Weather Bulletin - 2014-09-21 issued at 18:12 UT (13:12 EST) / Bulletin de météorologie spatiale - 2014-09-21 diffusé à 18:12 TU (13:12 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-09-21 issued at 18:12 UT (13:12 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:00 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

One coronal hole is located near the edge of the solar disk.

Two coronal holes are located near the centre of the solar disk.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been primarily positive at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** September-22-14 1:31 PM

**Subject:** Space Weather Bulletin - 2014-09-22 issued at 17:29 UT (12:29 EST) / Bulletin de météorologie spatiale - 2014-09-22 diffusé à 17:29 TU (12:29 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-09-22 issued at 17:29 UT (12:29 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:15 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: active

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.

Two non-Earth-directed CMEs erupted on 22 SEP 2014 at 06:21 UT and 08:48 UT.

Two coronal holes are located near the centre of the solar disk.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** September-23-14 3:25 PM

**Subject:** Space Weather Bulletin - 2014-09-23 issued at 19:18 UT (14:18 EST) / Bulletin de météorologie spatiale - 2014-09-23 diffusé à 19:18 TU (14:18 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-09-23 issued at 19:18 UT (14:18 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (19:00 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: unsettled

sub-auroral zone: unsettled

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

### Detailed Information

#### Solar

Solar activity has been low.

Two medium coronal holes are located near the centre of the solar disk.

#### Interplanetary

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** September-24-14 4:35 PM

**Subject:** Space Weather Bulletin - 2014-09-24 issued at 20:28 UT (15:28 EST) / Bulletin de météorologie spatiale - 2014-09-24 diffusé à 20:28 TU (15:28 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-09-24 issued at 20:28 UT (15:28 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (20:00 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: unsettled

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: active with stormy intervals

sub-auroral zone: unsettled

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

Aeromagnetic surveys: Potential for significant disruptions in the auroral zone.

Directional Drilling: Potential for significant deviations in the auroral zone.

#### **Detailed Information**

## Solar

Solar activity has been low.

One medium coronal hole is located near the centre of the solar disk.

## Interplanetary

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|Bz| < 10$  nT) levels.

## Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been active in the polar zone, active with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, active with stormy intervals in the auroral zone, and unsettled in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** September-25-14 2:14 PM

**Subject:** Space Weather Bulletin - 2014-09-25 issued at 18:06 UT (13:06 EST) / Bulletin de météorologie spatiale - 2014-09-25 diffusé à 18:06 TU (13:06 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-09-25 issued at 18:06 UT (13:06 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (17:45 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: unsettled

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with stormy intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.

Directional Drilling: Potential for significant deviations in the polar cap zone.

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

Geostationary satellites: moderate risk of internal charging.

**Detailed Information**

**Solar**

Solar activity has been low.

One medium coronal hole is located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** September-26-14 4:13 PM

**Subject:** Space Weather Bulletin - 2014-09-26 issued at 20:05 UT (15:05 EST) / Bulletin de météorologie spatiale - 2014-09-26 diffusé à 20:05 TU (15:05 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-09-26 issued at 20:05 UT (15:05 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:45 UT)**

**Geomagnetic Activity:**

polar cap zone: active

auroral zone: unsettled

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with stormy intervals

sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

Power Systems: possibility of weak voltage fluctuations in the auroral zone.

Aeromagnetic surveys: Potential for significant disruptions in the auroral zone.

Directional Drilling: Potential for significant deviations in the auroral zone.

**Detailed Information****Solar**

Solar activity has been low.

One small coronal hole is located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** September-27-14 5:03 PM

**Subject:** Space Weather Bulletin - 2014-09-27 issued at 20:30 UT (15:30 EST) / Bulletin de météorologie spatiale - 2014-09-27 diffusé à 20:30 TU (15:30 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-09-27 issued at 20:30 UT (15:30 EST)**

## Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (20:30 UT)

#### Geomagnetic Activity:

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled with active intervals

auroral zone: unsettled with stormy intervals

sub-auroral zone: quiet with unsettled intervals

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: moderate

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

Power Systems: possibility of weak voltage fluctuations in the auroral zone.

Aeromagnetic surveys: Potential for significant disruptions in the auroral zone.

Directional Drilling: Potential for significant deviations in the auroral zone.

Geostationary satellites: moderate risk of internal charging.

## Detailed Information

### Solar

Solar activity has been low.

### Interplanetary

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sfpl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** September-28-14 4:48 PM

**Subject:** Space Weather Bulletin - 2014-09-28 issued at 20:00 UT (15:00 EST) / Bulletin de météorologie spatiale - 2014-09-28 diffusé à 20:00 TU (15:00 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-09-28 issued at 20:00 UT (15:00 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (20:00 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: moderate

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

Geostationary satellites: moderate risk of internal charging.

### Detailed Information

#### Solar

Solar activity has been low.

#### Interplanetary

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** September-29-14 2:45 PM

**Subject:** Space Weather Bulletin - 2014-09-29 issued at 18:43 UT (13:43 EST) / Bulletin de météorologie spatiale - 2014-09-29 diffusé à 18:43 TU (13:43 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-09-29 issued at 18:43 UT (13:43 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** September-30-14 4:37 PM

**Subject:** Space Weather Bulletin - 2014-09-30 issued at 20:33 UT (15:33 EST) / Bulletin de météorologie spatiale - 2014-09-30 diffusé à 20:33 TU (15:33 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-09-30 issued at 20:33 UT (15:33 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (20:15 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: unavailable

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

##### **Interplanetary**

The solar wind speed is currently very slow (~ 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** October-01-14 2:10 PM

**Subject:** Space Weather Bulletin - 2014-10-01 issued at 17:36 UT (12:36 EST) / Bulletin de météorologie spatiale - 2014-10-01 diffusé à 17:36 TU (12:36 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-10-01 issued at 17:36 UT (12:36 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (17:15 UT)**

###### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: active

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

### Detailed Information

#### Solar

Solar activity has been low.

#### Interplanetary

The solar wind speed is currently very slow (~400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** October-02-14 1:54 PM

**Subject:** Space Weather Bulletin - 2014-10-02 issued at 17:47 UT (12:47 EST) / Bulletin de météorologie spatiale - 2014-10-02 diffusé à 17:47 TU (12:47 HNE)

La version française du bulletin suit.

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### Space Weather Bulletin - 2014-10-02 issued at 17:47 UT (12:47 EST)

#### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### Current Conditions (17:15 UT)

##### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

##### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: unavailable

##### Possible Impacts on Technology:

Impacts are not expected.

#### 24 Hour Forecast

##### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (~ 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** October-03-14 2:53 PM

**To:** SW\_bulletin@geolab.nrcan.gc.ca

**Subject:** Space Weather Bulletin - 2014-10-03 issued at 18:48 UT (13:48 EST) / Bulletin de météorologie spatiale - 2014-10-03 diffusé à 18:48 TU (13:48 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-10-03 issued at 18:48 UT (13:48 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

An M (medium) solar x-ray flare erupted 02 OCT 2014 19:01 UT near the edge of the solar disk.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** October-04-14 5:20 PM

**Subject:** Space Weather Bulletin - 2014-10-04 issued at 21:14 UT (16:14 EST) / Bulletin de météorologie spatiale - 2014-10-04 diffusé à 21:14 TU (16:14 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-10-04 issued at 21:14 UT (16:14 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:45 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

##### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** October-05-14 5:05 PM

**Subject:** Space Weather Bulletin - 2014-10-05 issued at 20:59 UT (15:59 EST) / Bulletin de météorologie spatiale - 2014-10-05 diffusé à 20:59 TU (15:59 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-10-05 issued at 20:59 UT (15:59 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (20:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

##### **Detailed Information**

###### **Solar**

Solar activity has been low.

###### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** October-06-14 2:19 PM

**Subject:** Space Weather Bulletin - 2014-10-06 issued at 18:17 UT (13:17 EST) / Bulletin de météorologie spatiale - 2014-10-06 diffusé à 18:17 TU (13:17 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-10-06 issued at 18:17 UT (13:17 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (17:45 UT)**

###### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|Bz| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** October-07-14 2:43 PM

**Subject:** Space Weather Bulletin - 2014-10-07 issued at 18:40 UT (13:40 EST) / Bulletin de météorologie spatiale - 2014-10-07 diffusé à 18:40 TU (13:40 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-10-07 issued at 18:40 UT (13:40 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** October-08-14 1:25 PM

**Subject:** Space Weather Bulletin - 2014-10-08 issued at 17:23 UT (12:23 EST) / Bulletin de météorologie spatiale - 2014-10-08 diffusé à 17:23 TU (12:23 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-10-08 issued at 17:23 UT (12:23 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (17:00 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).  
The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.  
Prolonged periods of negative interplanetary magnetic field are often associated with increased geomagnetic activity.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit for 07 OCT 2014 is unavailable but is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** October-09-14 1:14 PM

**Subject:** Space Weather Bulletin - 2014-10-09 issued at 17:13 UT (12:13 EST) / Bulletin de météorologie spatiale - 2014-10-09 diffusé à 17:13 TU (12:13 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-10-09 issued at 17:13 UT (12:13 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:00 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.

#### **Interplanetary**

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

Prolonged periods of negative interplanetary magnetic field are often associated with increased geomagnetic activity.

The solar wind speed is currently slow (400-500 km/s).

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and unsettled with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** October-10-14 3:18 PM

**Subject:** Space Weather Bulletin - 2014-10-10 issued at 19:16 UT (14:16 EST) / Bulletin de météorologie spatiale - 2014-10-10 diffusé à 19:16 TU (14:16 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-10-10 issued at 19:16 UT (14:16 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:45 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

**Detailed Information**

**Solar**

Solar activity has been moderate.

A long duration C (low) solar x-ray flare erupted at 10 OCT 2014 15:45 UT near the edge of the solar disk.

A CME erupted on 10 OCT 2014 15:24 UT. It is not yet known if the CME will impact the Earth.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** October-11-14 2:46 PM

**Subject:** Space Weather Bulletin - 2014-10-11 issued at 18:41 UT (13:41 EST) / Bulletin de météorologie spatiale - 2014-10-11 diffusé à 18:41 TU (13:41 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-10-11 issued at 18:41 UT (13:41 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:15 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been moderate.

A slow CME was observed on 10 oct 2014, and is expected to deliver a glancing blow to the Earth on 14 oct 2014.

#### Interplanetary

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** October-12-14 12:32 PM

**Subject:** Space Weather Bulletin - 2014-10-12 issued at 16:31 UT (11:31 EST) / Bulletin de météorologie spatiale - 2014-10-12 diffusé à 16:31 TU (11:31 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-10-12 issued at 16:31 UT (11:31 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (16:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

A slow CME was observed on 10 OCT 2014, and is expected to deliver a glancing blow to the Earth on 12 OCT 2014.

**Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** October-13-14 9:00 PM

**Subject:** Space Weather Bulletin - 2014-10-14 issued at 00:58 UT (19:58 EST) / Bulletin de météorologie spatiale - 2014-10-14 diffusé à 00:58 TU (19:58 HNE)

La version française du bulletin suit.

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### Space Weather Bulletin - 2014-10-14 issued at 00:58 UT (19:58 EST)

#### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### Current Conditions (00:45 UT)

##### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: low

##### Possible Impacts on Technology:

Impacts are not expected.

#### 24 Hour Forecast

##### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

##### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

##### Possible Impacts on Technology:

Impacts are not expected.

#### Detailed Information

##### Solar

Solar activity has been low.

A slow CME was observed on 10 OCT 2014, and is expected to deliver a glancing blow to the Earth on 14 OCT 2014.

##### Interplanetary

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** October-14-14 2:51 PM

**Subject:** Space Weather Bulletin - 2014-10-14 issued at 18:50 UT (13:50 EST) / Bulletin de météorologie spatiale - 2014-10-14 diffusé à 18:50 TU (13:50 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-10-14 issued at 18:50 UT (13:50 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (18:30 UT)**

###### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: active

sub-auroral zone: active

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: unsettled

sub-auroral zone: quiet with unsettled intervals

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **Detailed Information**

###### **Solar**

Solar activity has been low.

### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

Prolonged periods of negative interplanetary magnetic field are often associated with increased geomagnetic activity.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** October-15-14 2:13 PM

**Subject:** Space Weather Bulletin - 2014-10-15 issued at 18:12 UT (13:12 EST) / Bulletin de météorologie spatiale - 2014-10-15 diffusé à 18:12 TU (13:12 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-10-15 issued at 18:12 UT (13:12 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:00 UT)**

#### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: unsettled

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information****Solar**

Solar activity has been moderate.

The active region located near the east limb of the solar disk has produced a long duration solar x-ray flare and an associated CME and has the potential to produce subsequent solar eruptions.

A fast non-Earth-directed CME erupted on 14 OCT 2014 19:00 UT.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** October-16-14 2:28 PM

**Subject:** Space Weather Bulletin - 2014-10-16 issued at 18:26 UT (13:26 EST) / Bulletin de météorologie spatiale - 2014-10-16 diffusé à 18:26 TU (13:26 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-10-16 issued at 18:26 UT (13:26 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)****Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

## 24 Hour Forecast

### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

### Possible Impacts on Technology:

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been moderate.

The active region located near the east limb of the solar disk has produced solar x-ray flares and an associated CME and has the potential to produce subsequent solar eruptions.

A fast non-Earth-directed CME erupted on 14 OCT 2014 18:48 UT.

### Interplanetary

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** October-17-14 1:40 PM

**Subject:** Space Weather Bulletin - 2014-10-17 issued at 17:39 UT (12:39 EST) / Bulletin de météorologie spatiale - 2014-10-17 diffusé à 17:39 TU (12:39 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-10-17 issued at 17:39 UT (12:39 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (17:30 UT)

#### Geomagnetic Activity:

polar cap zone: active  
auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: unsettled

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**Detailed Information**

**Solar**

Solar activity has been moderate.

The active region located near the east limb of the solar disk has produced solar x-ray flares and an associated CME and has the potential to produce subsequent solar eruptions.

One medium coronal hole is located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** October-18-14 2:28 PM

**Subject:** Space Weather Bulletin - 2014-10-18 issued at 18:23 UT (13:23 EST) / Bulletin de météorologie spatiale - 2014-10-18 diffusé à 18:23 TU (13:23 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-10-18 issued at 18:23 UT (13:23 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:00 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: active

sub-auroral zone: unsettled

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and sub-auroral zones.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.

The active region located near the east limb of the solar disk has produced solar x-ray flares and an associated CME and has the potential to produce subsequent solar eruptions.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** October-19-14 6:11 PM

**Subject:** Space Weather Bulletin - 2014-10-19 issued at 22:10 UT (17:10 EST) / Bulletin de météorologie spatiale - 2014-10-19 diffusé à 22:10 TU (17:10 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-10-19 issued at 22:10 UT (17:10 EST)**

### **Summary**

There is currently no major storm watch in effect.

A medium to large long duration solar x-ray flare has erupted over the past 24 hours.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (22:00 UT)**

#### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

### **Detailed Information**

#### **Solar**

Solar activity has been high.

A long duration X (large) solar x-ray flare erupted at 19 OCT 2014 04:17 UT near the centre of the solar disk.

One large coronal hole is located near the centre of the solar disk.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** October-20-14 4:08 PM

**Subject:** Space Weather Bulletin - 2014-10-20 issued at 20:05 UT (15:05 EST) / Bulletin de météorologie spatiale - 2014-10-20 diffusé à 20:05 TU (15:05 HNE)

La version française du bulletin suit.

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### Space Weather Bulletin - 2014-10-20 issued at 20:05 UT (15:05 EST)

#### Summary

There is currently no major storm watch in effect.

Stormy conditions are currently observed in the polar cap and auroral zones.

Disturbed geomagnetic conditions are expected 20 OCT 2014 to 22 OCT 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### Current Conditions (19:45 UT)

##### Geomagnetic Activity:

polar cap zone: stormy

auroral zone: stormy

sub-auroral zone: unsettled

##### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

##### Possible Impacts on Technology:

Power Systems: possibility of weak voltage fluctuations in the polar cap and auroral zones.

Aeromagnetic surveys: Potential for significant disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for significant deviations in the polar cap and auroral zones.

#### 24 Hour Forecast

##### Geomagnetic Activity:

polar cap zone: unsettled with stormy intervals

auroral zone: active with stormy intervals

sub-auroral zone: unsettled

##### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

##### Possible Impacts on Technology:

Power Systems: possibility of weak voltage fluctuations in the polar cap and auroral zones.

Aeromagnetic surveys: Potential for significant disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for significant deviations in the polar cap and auroral zones.

#### Detailed Information

##### Solar

Solar activity has been high.

Several medium solar x-ray flares have erupted over the past 24 hours.

The active region located near the central region of the solar disk has produced solar x-ray flares and has the potential to produce subsequent solar eruptions.

One medium coronal hole is located near the centre of the solar disk.

### **Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

Prolonged periods of negative interplanetary magnetic field are often associated with increased geomagnetic activity.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and unsettled with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and unsettled in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** October-21-14 5:15 PM

**Subject:** Space Weather Bulletin - 2014-10-21 issued at 21:14 UT (16:14 EST) / Bulletin de météorologie spatiale - 2014-10-21 diffusé à 21:14 TU (16:14 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-10-21 issued at 21:14 UT (16:14 EST)**

#### **Summary**

There is currently no major storm watch in effect.

Several medium solar x-ray flares have erupted over the past 24 hours.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (21:00 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: active  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

**Detailed Information**

**Solar**

Solar activity has been moderate.

The active region located near the east limb of the solar disk has produced solar x-ray flares and an associated CME and has the potential to produce subsequent solar eruptions.

Several medium solar x-ray flares have erupted over the past 24 hours.

**Interplanetary**

Interplanetary activity has been moderate.

Moderate solar wind speeds are due to high speed streams from coronal holes.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, active in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** October-22-14 3:50 PM

**Subject:** Space Weather Bulletin - 2014-10-22 issued at 19:48 UT (14:48 EST) / Bulletin de météorologie spatiale - 2014-10-22 diffusé à 19:48 TU (14:48 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-10-22 issued at 19:48 UT (14:48 EST)**

**Summary**

There is currently no major storm watch in effect.

Two medium to large solar x-ray flares have erupted over the past 24 hours.

CMEs may be associated with these flares.

Disturbed geomagnetic conditions are expected 22 Oct 2014 to 23 Oct 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: unsettled  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with active intervals  
auroral zone: active  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

**Detailed Information**

**Solar**

There is one active region visible on the solar disk.

The active region located near the central region of the solar disk has produced solar x-ray flares and has the potential to produce subsequent solar eruptions.

**Interplanetary**

Interplanetary activity has been moderate.

Moderate solar wind speeds are due to high speed streams from coronal holes.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, active in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** October-23-14 4:27 PM

**Subject:** Space Weather Bulletin - 2014-10-23 issued at 20:26 UT (15:26 EST) / Bulletin de météorologie spatiale - 2014-10-23 diffusé à 20:26 TU (15:26 HNE)

La version française du bulletin suit.

## **Space Weather Bulletin - 2014-10-23 issued at 20:26 UT (15:26 EST)**

### **Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 23 Oct 2014 to 24 Oct 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (20:00 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

Geostationary satellites: moderate risk of internal charging.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

Several medium solar x-ray flares have erupted over the past 24 hours.

One medium coronal hole is located near the centre of the solar disk.

#### **Interplanetary**

Interplanetary activity has been low.

Moderate solar wind speeds are due to high speed streams from coronal holes.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** October-24-14 4:30 PM

**Subject:** Space Weather Bulletin - 2014-10-24 issued at 20:29 UT (15:29 EST) / Bulletin de météorologie spatiale - 2014-10-24 diffusé à 20:29 TU (15:29 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-10-24 issued at 20:29 UT (15:29 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (20:15 UT)**

#### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

One small coronal hole is located near the centre of the solar disk.

#### **Interplanetary**

Interplanetary activity has been low.

Moderate solar wind speeds are due to high speed streams from coronal holes.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** October-25-14 5:06 PM

**Subject:** Space Weather Bulletin - 2014-10-25 issued at 21:05 UT (16:05 EST) / Bulletin de météorologie spatiale - 2014-10-25 diffusé à 21:05 TU (16:05 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-10-25 issued at 21:05 UT (16:05 EST)**

**Summary**

There is currently no major storm watch in effect.

Two large solar x-ray flares have erupted over the past 24 hours.

CMEs may be associated with these flares.

Disturbed geomagnetic conditions are expected 25 Oct 2014 to 26 Oct 2014 due to high speed streams from coronal holes.

An ionospheric absorption event is possible.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:45 UT)**

**Geomagnetic Activity:**

polar cap zone: active

auroral zone: unsettled

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

**Detailed Information**

**Solar**

Solar activity has been moderate.

Two large solar x-ray flares have erupted over the past 24 hours.

One medium coronal hole is located near the centre of the solar disk.

### **Interplanetary**

Interplanetary activity has been low.

Moderate solar wind speeds are due to high speed streams from coronal holes.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** October-26-14 4:29 PM

**Subject:** Space Weather Bulletin - 2014-10-26 issued at 20:27 UT (15:27 EST) / Bulletin de météorologie spatiale - 2014-10-26 diffusé à 20:27 TU (15:27 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-10-26 issued at 20:27 UT (15:27 EST)**

#### **Summary**

There is currently no major storm watch in effect.

Several medium to large solar x-ray flares have erupted over the past 24 hours.

CMEs may be associated with these flares.

Disturbed geomagnetic conditions are expected 26 Oct 2014 to 27 Oct 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (20:15 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: unsettled

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been moderate.

The active region located near the west limb of the solar disk has produced solar x-ray flares and has the potential to produce subsequent solar eruptions.

**Interplanetary**

Interplanetary activity has been low.

Moderate solar wind speeds are due to high speed streams from coronal holes.

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** October-27-14 2:34 PM

**Subject:** Space Weather Bulletin - 2014-10-27 issued at 18:33 UT (13:33 EST) / Bulletin de météorologie spatiale - 2014-10-27 diffusé à 18:33 TU (13:33 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-10-27 issued at 18:33 UT (13:33 EST)****Summary**

There is currently no major storm watch in effect.

Several medium to large solar x-ray flares have erupted over the past 24 hours.

CMEs may be associated with these flares.

An ionospheric absorption event is possible.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)****Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

**Detailed Information**

**Solar**

Solar activity has been moderate.

Several medium to large solar x-ray flares have erupted over the past 24 hours.

**Interplanetary**

Interplanetary activity has been low.

Moderate solar wind speeds are due to high speed streams from coronal holes.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** October-28-14 4:48 PM

**Subject:** Space Weather Bulletin - 2014-10-28 issued at 20:47 UT (15:47 EST) / Bulletin de météorologie spatiale - 2014-10-28 diffusé à 20:47 TU (15:47 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-10-28 issued at 20:47 UT (15:47 EST)**

**Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 28 Oct 2014 to 29 Oct 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (20:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active  
auroral zone: active  
sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.  
Directional Drilling: Potential for deviations in the polar cap and auroral zones.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals  
auroral zone: active  
sub-auroral zone: quiet with unsettled intervals

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.  
Directional Drilling: Potential for deviations in the polar cap and auroral zones.

### **Detailed Information**

#### **Solar**

Solar activity has been low.  
Two medium solar x-ray flares have erupted over the past 24 hours.  
Two small coronal holes are located near the centre of the solar disk.

#### **Interplanetary**

Interplanetary activity has been moderate.  
Moderate solar wind speeds are due to high speed streams from coronal holes.  
The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, active in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** October-29-14 2:04 PM

**Subject:** Space Weather Bulletin - 2014-10-29 issued at 18:03 UT (13:03 EST) / Bulletin de météorologie spatiale - 2014-10-29 diffusé à 18:03 TU (13:03 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-10-29 issued at 18:03 UT (13:03 EST)**

### **Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 29 Oct 2014 to 30 Oct 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

Two medium solar x-ray flares have erupted over the past 24 hours.

One medium coronal hole is located near the centre of the solar disk.

#### **Interplanetary**

Interplanetary activity has been low.

Moderate solar wind speeds are due to high speed streams from coronal holes.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** October-30-14 4:05 PM

**Subject:** Space Weather Bulletin - 2014-10-30 issued at 20:03 UT (15:03 EST) / Bulletin de météorologie spatiale - 2014-10-30 diffusé à 20:03 TU (15:03 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-10-30 issued at 20:03 UT (15:03 EST)**

**Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 30 Oct 2014 to 31 Oct 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:45 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

Two small coronal holes are located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

Moderate solar wind speeds are due to high speed streams from coronal holes.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** October-31-14 4:08 PM

**Subject:** Space Weather Bulletin - 2014-10-31 issued at 20:07 UT (15:07 EST) / Bulletin de météorologie spatiale - 2014-10-31 diffusé à 20:07 TU (15:07 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-10-31 issued at 20:07 UT (15:07 EST)**

#### **Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 31 Oct 2014 to 01 Nov 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (19:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

##### **Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

Two small coronal holes are located near the centre of the solar disk.

### **Interplanetary**

Interplanetary activity has been moderate.

Moderate solar wind speeds are due to high speed streams from coronal holes.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** November-01-14 6:16 PM

**Subject:** Space Weather Bulletin - 2014-11-01 issued at 22:15 UT (17:15 EST) / Bulletin de météorologie spatiale - 2014-11-01 diffusé à 22:15 TU (17:15 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-11-01 issued at 22:15 UT (17:15 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (22:00 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been low.

Two small coronal holes are located near the centre of the solar disk.

### Interplanetary

Interplanetary activity has been low.

A solar energetic proton event started on 01 Nov 2014 19:00 UT. Current levels are moderate.

Moderate solar wind speeds are due to high speed streams from coronal holes.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** November-02-14 4:35 PM

**Subject:** Space Weather Bulletin - 2014-11-02 issued at 21:34 UT (16:34 EST) / Bulletin de météorologie spatiale - 2014-11-02 diffusé à 21:34 TU (16:34 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-11-02 issued at 21:34 UT (16:34 EST)

### Summary

There is currently no major storm watch in effect.

A polar cap absorption event is possible.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (21:15 UT)

#### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

**Detailed Information**

**Solar**

Solar activity has been low.

Two small coronal holes are located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been moderate.

Moderate solar wind speeds are due to high speed streams from coronal holes.

A solar energetic proton event started on 01 Nov 2014 18:00 UT. Current levels are moderate.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** November-03-14 2:05 PM

**Subject:** Space Weather Bulletin - 2014-11-03 issued at 19:04 UT (14:04 EST) / Bulletin de météorologie spatiale - 2014-11-03 diffusé à 19:04 TU (14:04 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-11-03 issued at 19:04 UT (14:04 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:45 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

One medium coronal hole is located near the edge of the solar disk.

##### **Interplanetary**

Interplanetary activity has been low.

A solar energetic proton event started on 01 Nov 2014 18:00 UT. Current levels are moderate.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-04-14 12:51 PM

**Subject:** Space Weather Bulletin - 2014-11-04 issued at 17:49 UT (12:49 EST) / Bulletin de météorologie spatiale - 2014-11-04 diffusé à 17:49 TU (12:49 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-11-04 issued at 17:49 UT (12:49 EST)**

##### **Summary**

There is currently no major storm watch in effect.

Several medium solar x-ray flares have erupted over the past 24 hours.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (17:30 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: active

sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

**Detailed Information**

**Solar**

Solar activity has been moderate.

Several medium solar x-ray flares have erupted over the past 24 hours.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|Bz| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-05-14 12:49 PM

**Subject:** Space Weather Bulletin - 2014-11-05 issued at 17:47 UT (12:47 EST) / Bulletin de météorologie spatiale - 2014-11-05 diffusé à 17:47 TU (12:47 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-11-05 issued at 17:47 UT (12:47 EST)**

**Summary**

There is currently no major storm watch in effect.

Two medium solar x-ray flares have erupted over the past 24 hours.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

#### **Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

### **Detailed Information**

#### **Solar**

The active region located near the east limb of the solar disk has produced solar x-ray flares and has the potential to produce subsequent solar eruptions.

Two non-Earth-directed CMEs erupted on 04 NOV 2014 at 07:48 UT and 08:48 UT.

One coronal hole is located near the centre of the solar disk.

Two medium solar x-ray flares have erupted over the past 24 hours.

#### **Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and unsettled with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-06-14 1:31 PM

**Subject:** Space Weather Bulletin - 2014-11-06 issued at 18:29 UT (13:29 EST) / Bulletin de météorologie spatiale - 2014-11-06 diffusé à 18:29 TU (13:29 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-11-06 issued at 18:29 UT (13:29 EST)**

### **Summary**

There is currently no major storm watch in effect.

Several medium solar x-ray flares have erupted over the past 24 hours.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:15 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

A CME was observed on 05 NOV 2014, and is expected to deliver a glancing blow to the Earth on 09 NOV 2014.

A CME was observed on 06 NOV 2014, and is expected to deliver a glancing blow to the Earth on 09 NOV 2014.

A non-Earth-directed CME erupted on 05 NOV 2014.

One coronal hole is located near the centre of the solar disk.

Several medium solar x-ray flares have erupted over the past 24 hours.

The active region located near the east limb of the solar disk has produced solar x-ray flares and associated CMEs and has the potential to produce subsequent solar eruptions.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-07-14 1:05 PM

**Subject:** Space Weather Bulletin - 2014-11-07 issued at 18:03 UT (13:03 EST) / Bulletin de météorologie spatiale - 2014-11-07 diffusé à 18:03 TU (13:03 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-11-07 issued at 18:03 UT (13:03 EST)**

#### **Summary**

There is currently no major storm watch in effect.

Several medium to large solar x-ray flares have erupted over the past 24 hours.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (17:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: unsettled

sub-auroral zone: unsettled

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been high.

The active region located near the east limb of the solar disk has produced a solar x-ray flare and an associated CME and has the potential to produce subsequent solar eruptions.

Several non-Earth-directed CMEs erupted on 06-07 NOV 2014.

One coronal hole is located near the centre of the solar disk.

Several medium to large solar x-ray flares have erupted over the past 24 hours.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-08-14 12:27 PM

**Subject:** Space Weather Bulletin - 2014-11-08 issued at 17:26 UT (12:26 EST) / Bulletin de météorologie spatiale - 2014-11-08 diffusé à 17:26 TU (12:26 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-11-08 issued at 17:26 UT (12:26 EST)**

##### **Summary**

There is currently no major storm watch in effect.

A large solar x-ray flare has erupted over the past 24 hours.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (17:15 UT)**

###### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

The active region located near the east limb of the solar disk has produced solar x-ray flares and associated CMEs and has the potential to produce subsequent solar eruptions.

A CME was observed on 07 NOV 2014, and is expected to deliver a glancing blow to the Earth on 10 NOV 2014, resulting in disturbed geomagnetic activity.

One coronal hole is located near the centre of the solar disk.

An X (large) solar x-ray flare erupted 07 NOV 2014 17:02 UT near the edge of the solar disk.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-09-14 1:37 PM

**Subject:** Space Weather Bulletin - 2014-11-09 issued at 18:35 UT (13:35 EST) / Bulletin de météorologie spatiale - 2014-11-09 diffusé à 18:35 TU (13:35 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-11-09 issued at 18:35 UT (13:35 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been moderate.

The active region located near the central region of the solar disk has produced solar x-ray flares and associated CMEs and has the potential to produce subsequent solar eruptions.

One coronal hole is located near the centre of the solar disk.

An M (medium) solar x-ray flare erupted 09 NOV 2014 15:32 UT.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-10-14 12:57 PM

**Subject:** Space Weather Bulletin - 2014-11-10 issued at 17:55 UT (12:55 EST) / Bulletin de météorologie spatiale - 2014-11-10 diffusé à 17:55 TU (12:55 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-11-10 issued at 17:55 UT (12:55 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active  
auroral zone: active  
sub-auroral zone: active

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap, auroral, and sub-auroral zones.  
Directional Drilling: Potential for deviations in the polar cap, auroral, and sub-auroral zones.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet with unsettled intervals

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.  
Directional Drilling: Potential for deviations in the polar cap and auroral zones.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.  
A non-Earth-directed CME erupted on 09 NOV 2014.  
An M (medium) solar x-ray flare erupted 09 NOV 2014 15:29 UT near the centre of the solar disk.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).  
The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-11-14 1:17 PM

**Subject:** Space Weather Bulletin - 2014-11-11 issued at 18:15 UT (13:15 EST) / Bulletin de météorologie spatiale - 2014-11-11 diffusé à 18:15 TU (13:15 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-11-11 issued at 18:15 UT (13:15 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:00 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: unsettled

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

#### **Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

One coronal hole is located near the centre of the solar disk.

One coronal hole is located near the edge of the solar disk.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been primarily positive at moderate ( $|Bz| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-12-14 12:45 PM

**Subject:** Space Weather Bulletin - 2014-11-12 issued at 17:44 UT (12:44 EST) / Bulletin de météorologie spatiale - 2014-11-12 diffusé à 17:44 TU (12:44 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-11-12 issued at 17:44 UT (12:44 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

A non-Earth-directed CME erupted on 11 NOV 2014 04:36 UT.

One coronal hole is located near the edge of the solar disk.

One coronal hole is located near the centre of the solar disk.

#### **Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).

The interplanetary magnetic field has been primarily positive at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-13-14 1:37 PM

**Subject:** Space Weather Bulletin - 2014-11-13 issued at 18:35 UT (13:35 EST) / Bulletin de météorologie spatiale - 2014-11-13 diffusé à 18:35 TU (13:35 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-11-13 issued at 18:35 UT (13:35 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

One coronal hole is located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been primarily positive at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-14-14 12:45 PM

**Subject:** Space Weather Bulletin - 2014-11-14 issued at 17:43 UT (12:43 EST) / Bulletin de météorologie spatiale - 2014-11-14 diffusé à 17:43 TU (12:43 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-11-14 issued at 17:43 UT (12:43 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (17:30 UT)**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

A non-Earth-directed CME erupted on 14 NOV 2014 00:34 UT.

One coronal hole is located near the centre of the solar disk.

##### **Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-15-14 1:43 PM

**Subject:** Space Weather Bulletin - 2014-11-15 issued at 18:41 UT (13:41 EST) / Bulletin de météorologie spatiale - 2014-11-15 diffusé à 18:41 TU (13:41 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-11-15 issued at 18:41 UT (13:41 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (18:30 UT)**

###### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet with unsettled intervals

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

##### **Detailed Information**

## Solar

Solar activity has been low.

Two coronal holes are located near the centre of the solar disk.

An M (medium) solar x-ray flare erupted 15 NOV 2014 11:55 UT.

## Interplanetary

The solar wind speed is currently moderate (500-700 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

## Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-16-14 8:18 AM

**Subject:** Space Weather Bulletin - 2014-11-16 issued at 13:16 UT (08:16 EST) / Bulletin de météorologie spatiale - 2014-11-16 diffusé à 13:16 TU (08:16 HNE) - UPDATE

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-11-16 issued at 13:16 UT (08:16 EST)

### Summary

The major storm WATCH issued 16 NOV 2014 06:37 UT for the auroral zone ended 16 NOV 2014 08:42 UT.

Stormy conditions are possible in the auroral zone within the next 24 hours.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (13:00 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: active

sub-auroral zone: unsettled

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled  
auroral zone: active with stormy intervals  
sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Power Systems: possibility of weak voltage fluctuations in the auroral zone.  
Geostationary satellites: moderate risk of internal charging.  
Aeromagnetic surveys: Potential for significant disruptions in the auroral zone.  
Directional Drilling: Potential for significant deviations in the auroral zone.

**Detailed Information**

**Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).  
Moderate solar wind speeds are due to high speed streams from coronal holes.  
The interplanetary magnetic field has been primarily negative at low ( $|B_z| < 5$  nT) levels.  
Prolonged periods of negative interplanetary magnetic field are often associated with increased geomagnetic activity.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, active with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be unsettled in the polar zone, active with stormy intervals in the auroral zone, and unsettled in the sub-auroral zone.  
Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-16-14 1:52 PM

**Subject:** Space Weather Bulletin - 2014-11-16 issued at 18:47 UT (13:47 EST) / Bulletin de météorologie spatiale - 2014-11-16 diffusé à 18:47 TU (13:47 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-11-16 issued at 18:47 UT (13:47 EST)**

**Summary**

The major storm WATCH issued 16 NOV 2014 06:37 UT for the auroral zone ended 16 NOV 2014 08:42 UT.  
There is currently no major storm watch in effect.  
Stormy conditions are possible in the polar cap and auroral zones within the next 24 hours.  
See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:30 UT)**

**Geomagnetic Activity:**

polar cap zone: stormy

auroral zone: unsettled  
sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Power Systems: possibility of weak voltage fluctuations in the polar cap zone.  
Aeromagnetic surveys: Potential for significant disruptions in the polar cap zone.  
Directional Drilling: Potential for significant deviations in the polar cap zone.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals  
auroral zone: active with stormy intervals  
sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Power Systems: possibility of weak voltage fluctuations in the polar cap and auroral zones.  
Geostationary satellites: moderate risk of internal charging.  
Aeromagnetic surveys: Potential for significant disruptions in the polar cap and auroral zones.  
Directional Drilling: Potential for significant deviations in the polar cap and auroral zones.

**Detailed Information**

**Solar**

Solar activity has been moderate.  
Two medium solar x-ray flares have erupted over the past 24 hours.  
Two coronal holes are located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).  
Moderate solar wind speeds are due to high speed streams from coronal holes.  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, active with stormy intervals in the auroral zone, and unsettled with stormy intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and unsettled in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Fiori, Robyn [mailto:Robyn.Fiori@NRCan-RNCan.gc.ca]

**Sent:** November-17-14 12:28 PM

**Subject:** Space Weather Bulletin - 2014-11-17 issued at 17:26 UT (12:26 EST) / Bulletin de météorologie spatiale - 2014-11-17 diffusé à 17:26 TU (12:26 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-11-17 issued at 17:26 UT (12:26 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (17:15 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: unsettled

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

#### **Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

#### **Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.

One coronal hole is located near the centre of the solar disk.

One coronal hole is located near the edge of the solar disk.

An M (medium) solar x-ray flare erupted 16 NOV 2014 17:48 UT.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a moderate level tomorrow.

The 5-minute integral energetic electron flux is currently high.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** November-18-14 3:45 PM

**Subject:** Space Weather Bulletin - 2014-11-18 issued at 20:41 UT (15:41 EST) / Bulletin de météorologie spatiale - 2014-11-18 diffusé à 20:41 TU (15:41 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-11-18 issued at 20:41 UT (15:41 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:30 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

Two coronal holes are located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** November-19-14 1:37 PM

**Subject:** Space Weather Bulletin - 2014-11-19 issued at 18:35 UT (13:35 EST) / Bulletin de météorologie spatiale - 2014-11-19 diffusé à 18:35 TU (13:35 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-11-19 issued at 18:35 UT (13:35 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:30 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

Two coronal holes are located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** November-20-14 3:08 PM

**Subject:** Space Weather Bulletin - 2014-11-20 issued at 20:03 UT (15:03 EST) / Bulletin de météorologie spatiale - 2014-11-20 diffusé à 20:03 TU (15:03 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-11-20 issued at 20:03 UT (15:03 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (19:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: unsettled

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

##### **Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

Two coronal holes are located near the centre of the solar disk.

##### **Interplanetary**

Interplanetary activity has been low.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** November-21-14 1:23 PM

**Subject:** Space Weather Bulletin - 2014-11-21 issued at 18:21 UT (13:21 EST) / Bulletin de météorologie spatiale - 2014-11-21 diffusé à 18:21 TU (13:21 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-11-21 issued at 18:21 UT (13:21 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (18:15 UT)**

###### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: unsettled

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **Detailed Information**

###### **Solar**

Solar activity has been low.

Two coronal holes are located near the edge of the solar disk.

One coronal hole is located near the centre of the solar disk.

### **Interplanetary**

Interplanetary activity has been low.

### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** November-22-14 1:46 PM

**Subject:** Space Weather Bulletin - 2014-11-22 issued at 18:41 UT (13:41 EST) / Bulletin de météorologie spatiale - 2014-11-22 diffusé à 18:41 TU (13:41 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-11-22 issued at 18:41 UT (13:41 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (18:30 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been low.  
Two coronal holes are located near the edge of the solar disk.  
One coronal hole is located near the centre of the solar disk.

### Interplanetary

Interplanetary activity has been low.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** November-23-14 2:18 PM

**Subject:** Space Weather Bulletin - 2014-11-23 issued at 19:15 UT (14:15 EST) / Bulletin de météorologie spatiale - 2014-11-23 diffusé à 19:15 TU (14:15 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-11-23 issued at 19:15 UT (14:15 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (19:00 UT)

#### Geomagnetic Activity:

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

One coronal hole is located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** November-24-14 1:25 PM

**Subject:** Space Weather Bulletin - 2014-11-24 issued at 18:22 UT (13:22 EST) / Bulletin de météorologie spatiale - 2014-11-24 diffusé à 18:22 TU (13:22 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-11-24 issued at 18:22 UT (13:22 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

One coronal hole is located near the centre of the solar disk.

One coronal hole elongated in longitude is located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** November-25-14 1:39 PM

**Subject:** Space Weather Bulletin - 2014-11-25 issued at 18:36 UT (13:36 EST) / Bulletin de météorologie spatiale - 2014-11-25 diffusé à 18:36 TU (13:36 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-11-25 issued at 18:36 UT (13:36 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:30 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

Two coronal holes are located near the centre of the solar disk.

##### **Interplanetary**

Interplanetary activity has been low.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** November-26-14 1:37 PM

**Subject:** Space Weather Bulletin - 2014-11-26 issued at 18:35 UT (13:35 EST) / Bulletin de météorologie spatiale - 2014-11-26 diffusé à 18:35 TU (13:35 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-11-26 issued at 18:35 UT (13:35 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (18:30 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

One coronal hole is located near the centre of the solar disk.

One coronal hole is located near the edge of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** November-27-14 1:59 PM

**Subject:** Space Weather Bulletin - 2014-11-27 issued at 18:57 UT (13:57 EST) / Bulletin de météorologie spatiale - 2014-11-27 diffusé à 18:57 TU (13:57 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-11-27 issued at 18:57 UT (13:57 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:45 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.  
One coronal hole is located near the centre of the solar disk.  
One coronal hole is located near the edge of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** November-28-14 1:12 PM

**Subject:** Space Weather Bulletin - 2014-11-28 issued at 18:08 UT (13:08 EST) / Bulletin de météorologie spatiale - 2014-11-28 diffusé à 18:08 TU (13:08 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-11-28 issued at 18:08 UT (13:08 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:00 UT)****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.  
One coronal hole is located near the centre of the solar disk.  
One coronal hole is located near the edge of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** November-29-14 2:40 PM

**Subject:** Space Weather Bulletin - 2014-11-29 issued at 19:37 UT (14:37 EST) / Bulletin de météorologie spatiale - 2014-11-29 diffusé à 19:37 TU (14:37 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-11-29 issued at 19:37 UT (14:37 EST)**

## Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

## Current Conditions (19:30 UT)

### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

### Possible Impacts on Technology:

Impacts are not expected.

## 24 Hour Forecast

### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

### Possible Impacts on Technology:

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been low.

One coronal hole is located near the centre of the solar disk.

### Interplanetary

Interplanetary activity has been low.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** November-30-14 2:30 PM

**Subject:** Space Weather Bulletin - 2014-11-30 issued at 19:26 UT (14:26 EST) / Bulletin de météorologie spatiale - 2014-11-30 diffusé à 19:26 TU (14:26 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-11-30 issued at 19:26 UT (14:26 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:15 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.  
One coronal hole is located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Lam, Hing-Lan [mailto:Hing-Lan.Lam@NRCan-RNCan.gc.ca]

**Sent:** December-01-14 2:02 PM

**Subject:** Space Weather Bulletin - 2014-12-01 issued at 18:59 UT (13:59 EST) / Bulletin de météorologie spatiale - 2014-12-01 diffusé à 18:59 TU (13:59 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-12-01 issued at 18:59 UT (13:59 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:45 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been moderate.

An M (medium) solar x-ray flare erupted 01 Dec 2014 06:41 UT.

One coronal hole is located near the edge of the solar disk.

#### **Interplanetary**

Interplanetary activity has been moderate.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** December-02-14 1:39 PM

**Subject:** Space Weather Bulletin - 2014-12-02 issued at 18:34 UT (13:34 EST) / Bulletin de météorologie spatiale - 2014-12-02 diffusé à 18:34 TU (13:34 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-12-02 issued at 18:34 UT (13:34 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:15 UT)

#### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been low.

#### Interplanetary

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** December-03-14 6:13 PM

**Subject:** Space Weather Bulletin - 2014-12-03 issued at 23:11 UT (18:11 EST) / Bulletin de météorologie spatiale - 2014-12-03 diffusé à 23:11 TU (18:11 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-12-03 issued at 23:11 UT (18:11 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (23:00 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** December-04-14 3:57 PM

**Subject:** Space Weather Bulletin - 2014-12-04 issued at 20:51 UT (15:51 EST) / Bulletin de météorologie spatiale - 2014-12-04 diffusé à 20:51 TU (15:51 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-12-04 issued at 20:51 UT (15:51 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been moderate.

Two medium solar x-ray flares have erupted over the past 24 hours.

**Interplanetary**

The solar wind speed is currently slow (~500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** December-05-14 1:49 PM

**Subject:** Space Weather Bulletin - 2014-12-05 issued at 18:43 UT (13:43 EST) / Bulletin de météorologie spatiale - 2014-12-05 diffusé à 18:43 TU (13:43 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-12-05 issued at 18:43 UT (13:43 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (18:15 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been low.

An M (medium) solar x-ray flare erupted 05 DEC 2014 11:33 UT.

#### Interplanetary

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at very low ( $|B_z| < 2$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** December-06-14 4:34 PM

**Subject:** Space Weather Bulletin - 2014-12-06 issued at 21:31 UT (16:31 EST) / Bulletin de météorologie spatiale - 2014-12-06 diffusé à 21:31 TU (16:31 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-12-06 issued at 21:31 UT (16:31 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (21:15 UT)**

##### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: unsettled

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet with unsettled intervals

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

##### **Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** December-07-14 1:53 PM

**Subject:** Space Weather Bulletin - 2014-12-07 issued at 18:41 UT (13:41 EST) / Bulletin de météorologie spatiale - 2014-12-07 diffusé à 18:41 TU (13:41 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-12-07 issued at 18:41 UT (13:41 EST)**

##### **Summary**

There is currently no major storm watch in effect.

The major storm WATCH issued 07 DEC 2014 15:32 UT for the auroral zone ended 07 DEC 2014 18:07 UT.

Disturbed geomagnetic conditions due to high speed streams from coronal holes are expected between 07 DEC 2014 and 08 DEC 2014.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (18:15 UT)**

###### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: active

sub-auroral zone: unsettled

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: active

sub-auroral zone: unsettled

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently fast (700-1000 km/s).

Fast solar wind speeds are due to high speed streams from coronal holes.

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and unsettled with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, active in the auroral zone, and unsettled in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** December-08-14 1:48 PM

**Subject:** Space Weather Bulletin - 2014-12-08 issued at 18:44 UT (13:44 EST) / Bulletin de météorologie spatiale - 2014-12-08 diffusé à 18:44 TU (13:44 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-12-08 issued at 18:44 UT (13:44 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)****Geomagnetic Activity:**

polar cap zone: active

auroral zone: active

sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

Geostationary satellites: moderate risk of internal charging.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with active intervals  
auroral zone: active with stormy intervals  
sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.  
Directional Drilling: Potential for deviations in the polar cap zone.  
Power Systems: possibility of weak voltage fluctuations in the auroral zone.  
Aeromagnetic surveys: Potential for significant disruptions in the auroral zone.  
Directional Drilling: Potential for significant deviations in the auroral zone.  
Geostationary satellites: moderate risk of internal charging.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently fast (~700 km/s).  
Fast solar wind speeds are due to high speed streams from coronal holes.  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with active intervals in the polar zone, active with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, active with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** December-09-14 4:27 PM

**Subject:** Space Weather Bulletin - 2014-12-09 issued at 21:22 UT (16:22 EST) / Bulletin de météorologie spatiale - 2014-12-09 diffusé à 21:22 TU (16:22 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-12-09 issued at 21:22 UT (16:22 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:00 UT)**

**Geomagnetic Activity:**

polar cap zone: active  
auroral zone: active  
sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.  
Directional Drilling: Potential for deviations in the polar cap and sub-auroral zones.  
Geostationary satellites: moderate risk of internal charging.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.  
Directional Drilling: Potential for deviations in the auroral zone.  
Geostationary satellites: moderate risk of internal charging.

**Detailed Information****Solar**

Solar activity has been low.  
One medium coronal hole is located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently slow (~500 km/s).  
The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be unsettled in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** December-10-14 1:41 PM

**Subject:** Space Weather Bulletin - 2014-12-10 issued at 18:39 UT (13:39 EST) / Bulletin de météorologie spatiale - 2014-12-10 diffusé à 18:39 TU (13:39 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-12-10 issued at 18:39 UT (13:39 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:15 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

**Detailed Information**

**Solar**

Solar activity has been low.

One medium coronal hole is located near the centre of the solar disk.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** December-11-14 1:47 PM

**Subject:** Space Weather Bulletin - 2014-12-11 issued at 18:43 UT (13:43 EST) / Bulletin de météorologie spatiale - 2014-12-11 diffusé à 18:43 TU (13:43 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-12-11 issued at 18:43 UT (13:43 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

#### **Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

One medium coronal hole is located near the centre of the solar disk.

#### **Interplanetary**

The solar wind speed is currently very slow (< 400 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** December-12-14 2:29 PM

**Subject:** Space Weather Bulletin - 2014-12-12 issued at 19:27 UT (14:27 EST) / Bulletin de météorologie spatiale - 2014-12-12 diffusé à 19:27 TU (14:27 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-12-12 issued at 19:27 UT (14:27 EST)**

### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (19:00 UT)**

#### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: unsettled

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

#### **Possible Impacts on Technology:**

Geostationary satellites: moderate risk of internal charging.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: active

sub-auroral zone: quiet with unsettled intervals

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

Two small coronal holes are located near the centre of the solar disk.

#### **Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a moderate level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled in the polar zone, active in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** December-13-14 1:54 PM

**Subject:** Space Weather Bulletin - 2014-12-13 issued at 18:50 UT (13:50 EST) / Bulletin de météorologie spatiale - 2014-12-13 diffusé à 18:50 TU (13:50 HNE)

La version française du bulletin suit.

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### Space Weather Bulletin - 2014-12-13 issued at 18:50 UT (13:50 EST)

#### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### Current Conditions (18:30 UT)

##### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

##### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: unavailable

##### Possible Impacts on Technology:

Impacts are not expected.

#### 24 Hour Forecast

##### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: moderate

##### Possible Impacts on Technology:

Geostationary satellites: moderate risk of internal charging.

#### Detailed Information

##### Solar

Solar activity has been moderate.

An M (medium) solar x-ray flare erupted 13 DEC 2014 05:13 UT near the edge of the solar disk.

Two small coronal holes are located near the centre of the solar disk.

##### Interplanetary

The solar wind speed is currently moderate (500-700 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

##### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** December-14-14 2:45 PM

**Subject:** Space Weather Bulletin - 2014-12-14 issued at 19:42 UT (14:42 EST) / Bulletin de météorologie spatiale - 2014-12-14 diffusé à 19:42 TU (14:42 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-12-14 issued at 19:42 UT (14:42 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (18:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: unavailable

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

#### **Detailed Information**

##### **Solar**

Solar activity has been low.

Two small coronal holes are located near the centre of the solar disk.

##### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit for 13 DEC 2014 is unavailable but is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Nikolic, Ljubomir [mailto:Ljubomir.Nikolic@NRCan-RNCan.gc.ca]

**Sent:** December-15-14 2:11 PM

**Subject:** Space Weather Bulletin - 2014-12-15 issued at 18:58 UT (13:58 EST) / Bulletin de météorologie spatiale - 2014-12-15 diffusé à 18:58 TU (13:58 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-12-15 issued at 18:58 UT (13:58 EST)**

##### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (18:30 UT)**

###### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap zone.

Directional Drilling: Potential for deviations in the polar cap zone.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: unsettled with active intervals

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap and auroral zones.

Directional Drilling: Potential for deviations in the polar cap and auroral zones.

##### **Detailed Information**

## Solar

Solar activity has been moderate.

An M (medium) solar x-ray flare erupted 14 DEC 2014 19:25 UT.

Two small coronal holes are located near the centre of the solar disk.

## Interplanetary

The solar wind speed is currently slow (~500 km/s).

The interplanetary magnetic field has been fluctuating at moderate ( $|B_z| < 10$  nT) levels.

## Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit for 14 DEC 2014 is unavailable but is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

## Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** December-16-14 5:07 PM

**Subject:** Space Weather Bulletin - 2014-12-16 issued at 22:06 UT (17:06 EST) / Bulletin de météorologie spatiale - 2014-12-16 diffusé à 22:06 TU (17:06 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-12-16 issued at 22:06 UT (17:06 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (21:45 UT)

#### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: quiet

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** December-17-14 4:59 PM

**Subject:** Space Weather Bulletin - 2014-12-17 issued at 21:58 UT (16:58 EST) / Bulletin de météorologie spatiale - 2014-12-17 diffusé à 21:58 TU (16:58 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-12-17 issued at 21:58 UT (16:58 EST)**

**Summary**

There is currently no major storm watch in effect.

A medium solar x-ray flare has erupted over the past 24 hours.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:45 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

There are several active regions visible on the solar disk.

The active region located near the central region of the solar disk has produced a solar x-ray flare .

One medium coronal hole is located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** December-18-14 3:31 PM

**Subject:** Space Weather Bulletin - 2014-12-18 issued at 20:30 UT (15:30 EST) / Bulletin de météorologie spatiale - 2014-12-18 diffusé à 20:30 TU (15:30 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-12-18 issued at 20:30 UT (15:30 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:15 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

## 24 Hour Forecast

### Geomagnetic Activity:

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

### Possible Impacts on Technology:

Impacts are not expected.

### Detailed Information

#### Solar

Solar activity has been low.

There are several active regions visible on the solar disk.

The active region located near the central region of the solar disk has produced a solar x-ray flare and has the potential to produce subsequent solar eruptions.

#### Interplanetary

Interplanetary activity has been low.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** December-19-14 2:25 PM

**Subject:** Space Weather Bulletin - 2014-12-19 issued at 19:18 UT (14:18 EST) / Bulletin de météorologie spatiale - 2014-12-19 diffusé à 19:18 TU (14:18 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-12-19 issued at 19:18 UT (14:18 EST)

### Summary

There is currently no major storm watch in effect.

A medium solar x-ray flare has erupted over the past 24 hours.

CMEs may be associated with these flares.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (19:00 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: quiet with unsettled intervals  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

The active region located near the central region of the solar disk has produced a solar x-ray flare and has the potential to produce subsequent solar eruptions.

A slow Earth-directed CME erupted on 18 Dec 21:00 UT and is expected to reach the Earth on 22 Dec 03:00, resulting in disturbed geomagnetic activity.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** December-20-14 4:00 PM

**Subject:** Space Weather Bulletin - 2014-12-20 issued at 20:58 UT (15:58 EST) / Bulletin de météorologie spatiale - 2014-12-20 diffusé à 20:58 TU (15:58 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-12-20 issued at 20:58 UT (15:58 EST)**

**Summary**

There is currently no major storm watch in effect.

Two medium to large solar x-ray flares have erupted over the past 24 hours.

CMEs may be associated with these flares.

Disturbed geomagnetic conditions due to solar activity are expected to be observed on the Earth between 21 Dec 2014 and 22 Dec 2014.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (20:45 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **24 Hour Forecast**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet with unsettled intervals

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

##### **Possible Impacts on Technology:**

Impacts are not expected.

#### **Detailed Information**

##### **Solar**

The active region located near the central region of the solar disk has produced solar x-ray flares and associated CMEs and has the potential to produce subsequent solar eruptions.

##### **Interplanetary**

Interplanetary activity has been low.

##### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

##### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet with unsettled intervals in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** December-21-14 2:01 PM

**Subject:** Space Weather Bulletin - 2014-12-21 issued at 18:59 UT (13:59 EST) / Bulletin de météorologie spatiale - 2014-12-21 diffusé à 18:59 TU (13:59 HNE)

La version française du bulletin suit.

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## **Space Weather Bulletin - 2014-12-21 issued at 18:59 UT (13:59 EST)**

### **Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions due to solar activity are expected to be observed on the Earth between 21 Dec 2014 and 22 Dec 2014.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: unsettled

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: unsettled

sub-auroral zone: quiet

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

The active region located near the central region of the solar disk has produced solar x-ray flares and associated CMEs.

A moderate CME was observed on 20Dec 2014, and is expected to deliver a glancing blow to the Earth on 22 Dec 2014, resulting in disturbed geomagnetic activity.

#### **Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).

The interplanetary magnetic field has been fluctuating at high ( $|B_z| < 20$  nT) levels.

An interplanetary shock has been observed on 21 Dec 2014 18:30 UT.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with unsettled intervals in the polar zone, quiet with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** December-22-14 4:05 PM

**Subject:** Space Weather Bulletin - 2014-12-22 issued at 21:04 UT (16:04 EST) / Bulletin de météorologie spatiale - 2014-12-22 diffusé à 21:04 TU (16:04 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-12-22 issued at 21:04 UT (16:04 EST)**

**Summary**

There is currently no major storm watch in effect.

Stormy conditions are possible in the polar cap and auroral zones within the next 24 hours.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:30 UT)**

**Geomagnetic Activity:**

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: unsettled with stormy intervals

sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Power Systems: possibility of weak voltage fluctuations in the auroral zone.

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

**Detailed Information**

**Solar**

Solar activity has been low.

A moderate Earth-directed CME erupted on 20 Dec 2014 and is expected to reach the Earth on 23 Dec 2014, resulting in disturbed geomagnetic activity.

**Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field has been primarily positive at very high ( $|B_z| > 20$  nT) levels.

Prolonged periods of negative interplanetary magnetic field are often associated with increased geomagnetic activity.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** December-23-14 3:17 PM

**Subject:** Space Weather Bulletin - 2014-12-23 issued at 20:14 UT (15:14 EST) /Bulletin de météorologie spatiale - 2014-12-23 diffusé à 20:14 TU (15:14 HNE)

La version française du bulletin suit.

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#### **Space Weather Bulletin - 2014-12-23 issued at 20:14 UT (15:14 EST)**

##### **Summary**

There is currently no major storm watch in effect.

Stormy conditions are possible in the polar cap, auroral, and sub-auroral zones within the next 24 hours.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

##### **Current Conditions (19:45 UT)**

###### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: quiet

sub-auroral zone: quiet

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

###### **Possible Impacts on Technology:**

Impacts are not expected.

##### **24 Hour Forecast**

###### **Geomagnetic Activity:**

polar cap zone: unsettled with stormy intervals

auroral zone: active with stormy intervals

sub-auroral zone: unsettled with stormy intervals

###### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

###### **Possible Impacts on Technology:**

Aeromagnetic surveys: Potential for disruptions in the polar cap, auroral, and sub-auroral zones.

Directional Drilling: Potential for deviations in the polar cap, auroral, and sub-auroral zones.  
Power Systems: possibility of weak voltage fluctuations in the auroral and sub-auroral zones.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

#### **Interplanetary**

The solar wind speed is currently slow (400-500 km/s).

The interplanetary magnetic field currently has  $B_z = -18$  nT.

An interplanetary shock has been observed on Dec 23 2014 10:30 UT.

Prolonged periods of negative interplanetary magnetic field are often associated with increased geomagnetic activity.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with stormy intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and unsettled with stormy intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** December-24-14 1:07 PM

**Subject:** Space Weather Bulletin - 2014-12-24 issued at 18:06 UT (13:06 EST) / Bulletin de météorologie spatiale - 2014-12-24 diffusé à 18:06 TU (13:06 HNE)

La version française du bulletin suit.

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### **Space Weather Bulletin - 2014-12-24 issued at 18:06 UT (13:06 EST)**

#### **Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

#### **Current Conditions (18:00 UT)**

##### **Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: unsettled

sub-auroral zone: quiet

##### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: low

##### **Possible Impacts on Technology:**

Impacts are not expected.

##### **24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been moderate.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone. Over the next 24 hours geomagnetic activity is forecast to be unsettled in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** December-25-14 3:44 PM

**Subject:** Space Weather Bulletin - 2014-12-25 issued at 20:43 UT (15:43 EST) / Bulletin de météorologie spatiale - 2014-12-25 diffusé à 20:43 TU (15:43 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-12-25 issued at 20:43 UT (15:43 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (20:30 UT)****Geomagnetic Activity:**

polar cap zone: active  
auroral zone: unsettled  
sub-auroral zone: unsettled

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

## 24 Hour Forecast

### Geomagnetic Activity:

polar cap zone: quiet with unsettled intervals  
auroral zone: unsettled  
sub-auroral zone: quiet

### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

### Possible Impacts on Technology:

Impacts are not expected.

## Detailed Information

### Solar

Solar activity has been low.  
One small coronal hole is located near the centre of the solar disk.

### Interplanetary

Interplanetary activity has been moderate.

### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a low level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

### Geomagnetic

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.  
Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.  
Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** December-26-14 2:13 PM

**Subject:** Space Weather Bulletin - 2014-12-26 issued at 19:12 UT (14:12 EST) / Bulletin de météorologie spatiale - 2014-12-26 diffusé à 19:12 TU (14:12 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-12-26 issued at 19:12 UT (14:12 EST)

### Summary

There is currently no major storm watch in effect.  
See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (19:00 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled  
auroral zone: active  
sub-auroral zone: unsettled

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: unsettled with active intervals  
sub-auroral zone: quiet with unsettled intervals

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** December-27-14 2:13 PM

**Subject:** Space Weather Bulletin - 2014-12-27 issued at 19:12 UT (14:12 EST) / Bulletin de météorologie spatiale - 2014-12-27 diffusé à 19:12 TU (14:12 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-12-27 issued at 19:12 UT (14:12 EST)****Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (19:00 UT)****Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet with unsettled intervals  
auroral zone: unsettled  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with active intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet with unsettled intervals in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** December-28-14 1:47 PM

**Subject:** Space Weather Bulletin - 2014-12-28 issued at 18:46 UT (13:46 EST) / Bulletin de météorologie spatiale - 2014-12-28 diffusé à 18:46 TU (13:46 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-12-28 issued at 18:46 UT (13:46 EST)**

**Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions are expected 28 Dec 2014 to 29 Dec 2014 due to high speed streams from coronal holes.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (18:30 UT)****Geomagnetic Activity:**

polar cap zone: unsettled  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast****Geomagnetic Activity:**

polar cap zone: quiet  
auroral zone: quiet  
sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information****Solar**

Solar activity has been low.  
One small coronal hole is located near the centre of the solar disk.

**Interplanetary**

Interplanetary activity has been low.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet in the polar zone, quiet with active intervals in the auroral zone, and quiet in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, quiet in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** Trichtchenko, Larisa [mailto:Larisa.Trichtchenko@NRCan-RNCan.gc.ca]

**Sent:** December-29-14 1:48 PM

**Subject:** Space Weather Bulletin - 2014-12-29 issued at 18:47 UT (13:47 EST) / Bulletin de météorologie spatiale - 2014-12-29 diffusé à 18:47 TU (13:47 HNE)

La version française du bulletin suit.

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**Space Weather Bulletin - 2014-12-29 issued at 18:47 UT (13:47 EST)**

**Summary**

There is currently no major storm watch in effect.

Disturbed geomagnetic conditions due to solar activity are currently observed in the auroral zone.

A polar cap absorption event is currently in progress in the auroral zone.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### **Current Conditions (18:30 UT)**

#### **Geomagnetic Activity:**

polar cap zone: active

auroral zone: stormy

sub-auroral zone: unsettled

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

HF radio: Ionospheric and polar cap absorptions events may affect radio communications for transpolar flights and other arctic operations.

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

### **24 Hour Forecast**

#### **Geomagnetic Activity:**

polar cap zone: unsettled with active intervals

auroral zone: active

sub-auroral zone: quiet with unsettled intervals

#### **Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: normal

#### **Possible Impacts on Technology:**

Impacts are not expected.

### **Detailed Information**

#### **Solar**

Solar activity has been low.

Two small coronal holes are located near the centre of the solar disk.

#### **Interplanetary**

Moderate solar wind speeds are due to high speed streams from coronal holes.

The interplanetary magnetic field has been fluctuating at moderate ( $|Bz| < 10$  nT) levels.

#### **Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### **Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, unsettled with stormy intervals in the auroral zone, and quiet with active intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled with active intervals in the polar zone, active in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** December-30-14 3:40 PM

**Subject:** Space Weather Bulletin - 2014-12-30 issued at 20:39 UT (15:39 EST) / Bulletin de météorologie spatiale - 2014-12-30 diffusé à 20:39 TU (15:39 HNE)

La version française du bulletin suit.

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## Space Weather Bulletin - 2014-12-30 issued at 20:39 UT (15:39 EST)

### Summary

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

### Current Conditions (20:30 UT)

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: quiet

sub-auroral zone: quiet

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Impacts are not expected.

### 24 Hour Forecast

#### Geomagnetic Activity:

polar cap zone: unsettled

auroral zone: active

sub-auroral zone: quiet with unsettled intervals

#### Environment at Geostationary orbit:

energetic electron fluence at geostationary orbit: normal

#### Possible Impacts on Technology:

Aeromagnetic surveys: Potential for disruptions in the auroral zone.

Directional Drilling: Potential for deviations in the auroral zone.

### Detailed Information

#### Solar

Solar activity has been low.

One large coronal hole is located near the edge of the solar disk.

#### Interplanetary

Moderate solar wind speeds are due to high speed streams from coronal holes.

The solar wind speed is currently moderate (500-700 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

#### Environment at Geostationary orbit

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a normal level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffl-eng.php> for the electron forecast.

#### Geomagnetic

Over the last 24 hours geomagnetic activity has been unsettled with stormy intervals in the polar zone, active with stormy intervals in the auroral zone, and quiet with stormy intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be unsettled in the polar zone, active in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.

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**From:** McKee, Lorne [mailto:Lorne.McKee@NRCan-RNCan.gc.ca]

**Sent:** December-31-14 5:00 PM

**Subject:** Space Weather Bulletin - 2014-12-31 issued at 21:58 UT (16:58 EST) / Bulletin de météorologie spatiale - 2014-12-31 diffusé à 21:58 TU (16:58 HNE)

[La version française du bulletin suit.](#)

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**Space Weather Bulletin - 2014-12-31 issued at 21:58 UT (16:58 EST)**

**Summary**

There is currently no major storm watch in effect.

See our website for current information: <http://www.spaceweather.gc.ca> (updated every 15 minutes)

**Current Conditions (21:45 UT)**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: quiet

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Impacts are not expected.

**24 Hour Forecast**

**Geomagnetic Activity:**

polar cap zone: quiet

auroral zone: unsettled

sub-auroral zone: quiet

**Environment at Geostationary orbit:**

energetic electron fluence at geostationary orbit: moderate

**Possible Impacts on Technology:**

Impacts are not expected.

**Detailed Information**

**Solar**

Solar activity has been low.

**Interplanetary**

The solar wind speed is currently moderate (500-700 km/s).

The interplanetary magnetic field has been fluctuating at low ( $|B_z| < 5$  nT) levels.

**Environment at Geostationary orbit**

Energetic electron fluence at geostationary orbit was at a normal level yesterday and is expected to be at a moderate level tomorrow.

Visit <http://www.spaceweather.gc.ca/sffi-eng.php> for the electron forecast.

**Geomagnetic**

Over the last 24 hours geomagnetic activity has been quiet with active intervals in the polar zone, quiet with stormy intervals in the auroral zone, and quiet with unsettled intervals in the sub-auroral zone.

Over the next 24 hours geomagnetic activity is forecast to be quiet in the polar zone, unsettled in the auroral zone, and quiet in the sub-auroral zone.

Visit <http://www.spaceweather.gc.ca/sfst-1-eng.php> for the magnetic forecast.